

<b>EPA</b> United States Environmental Protection Agency Washington, DC 20460 <b>Work Assignment</b>						Work Assignment Number 3-01				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-C-15-022			Contract Period   09/01/2015   To   06/30/2019 Base                      Option Period Number       3			Title of Work Assignment/SF Site Name Tech Support for Nat'l Water				
Contractor Cadmus Group LLC, The					Specify Section and paragraph of Contract SOW 1.0, 2.0, 6.0					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance  From   07/01/2018   To   06/30/2019					
Comments: Immediate start is authorized for this work assignment but work shall not commence until 7/1/2018.										
<input type="checkbox"/> Superfund                      Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
SFO <input type="checkbox"/> Note: To report additional accounting and appropriations date use EPA Form 1900-69A. (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:		LOE:						
09/01/2015   To   06/30/2019				0						
This Action:				610						
Total:				610						
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee		LOE:				
Cumulative Approved:				Cost/Fee		LOE:				
Work Assignment Manager Name   Robyn Delehanty  <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: 202-564-3880 FAX Number:				
Project Officer Name   Nancy Parrotta  <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: 202-564-5260 FAX Number:				
Other Agency Official Name   Lisa Mitchell-Flinn  <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: 513-487-2852 FAX Number:				
Contracting Official Name   Angela Lower  <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: 513-487-2036 FAX Number:				

## **PERFORMANCE WORK STATEMENT**

**Cadmus EP-C-15-022**

**Work Assignment No. 3-01**

**Period of Performance: 7/1/18-6/30/19**

### **I. ADMINISTRATIVE:**

**A. Title:** Technical Support in Administration and Management of National Water Program

**B. Work Assignment Contracting  
Officer's Representative (WACOR):**

**Robyn Delehanty**

Office of Wastewater Management (OWM)

1200 Pennsylvania Avenue, NW (4201M)

Washington, DC 20460

202-564-3880

[Delehanty.robyn@epa.gov](mailto:Delehanty.robyn@epa.gov)

**Alternate Work Assignment Contracting  
Officer's Representative (Alt. WACOR):**

**Kit Farber**

Office of Wastewater Management (OWM)

1200 Pennsylvania Avenue, NW (4201M)

Washington, DC 20460

202-564-0601

[Farber.kit@epa.gov](mailto:Farber.kit@epa.gov)

LOE: 610 Hours

PWS: 1.0, 2.0 and 6.0

### **C. Quality Assurance**

Task(s) 1, 2 and 3 of this work assignment require quality assurance (QA). Collection, use and analysis of data will be identical to the procedures described in the Supplemental Project Specific Quality Assurance Project Plan (SQAPP) completed under Task 0 of WA 0-01, consistent with the Agency's Quality Assurance (QA) requirements, appending the Contract Quality Assurance Project Plan (QAPP). The project specific QA requirements must be addressed in the monthly progress reports as specified under Task 0, below.

### **D. Background:**

The Office of Water has responsibility for establishing national program policy and a regulatory framework to ensure safe and clean water. This work assignment supports the Environmental Protection Agency's (EPA) Strategic Goal 1, Objective 1.2 Provide for Clean and Safe Water. The Office of Wastewater Management (OWM) provides oversight, assistance, and financial support to state, interstate, and tribal partners to support implementation of water pollution control programs. Water pollution control grant program funds assist states, interstates, and tribes in the prevention and abatement of surface and ground water pollution from both point and nonpoint sources. The program supports a broad spectrum of water quality program components, including: a) water quality planning, b) ambient water quality monitoring and assessments, c) water quality standards, d) total maximum daily loads (TMDLs), e) permitting, f) compliance and enforcement, and g) ground water protection.

### **II. OBJECTIVE:**

This work assignment provides contractor technical support to the National Water Program for program integration and oversight of Regional, state, interstate, and tribal water quality programs, including ground water protection. Technical support includes: (1) data analysis, (2) program analyses relating to implementation of state and tribal programs, and (3) maintaining the



water pollution control grant program allocation formula and model for developing annual state, interstate, and regional tribal allocations.

### **III. TASK DETAIL:**

The contractor shall perform the following tasks:

#### **Task 0: Work Plan and Monthly Progress Reports**

The contractor shall develop a work plan that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the contractor's key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. If a subcontractor(s) is proposed and subcontractors are outside the local metropolitan area, the contractor shall include information on plans to manage work and contract costs.

In addition, the contractor shall prepare a statement indicating that this WA is a continuation of WA 2-01. The work plan shall explain that collection, use and analysis of data in this work assignment will be identical to the procedures described in the SQAPP completed under task 0 of WA 0-01. This task also includes monthly progress and financial reports. The monthly progress report shall indicate, in a separate QA section, whether significant QA issues have been identified and how they are being resolved. Monthly financial reports must be provided in accordance with the reporting requirements within the contract to include a table with the invoice LOE and costs broken out by the tasks in this WA. The contractor shall immediately notify the Contract Level Contracting Officer Representative (CLCOR) and Work Assignment Contracting Officer Representative (WACOR) if any changes to the tasks involving the collection and analysis of the data occur and prepare a new SQAPP supplementing the Contract QAPP accordingly. Work on these tasks cannot proceed until the contractor receives notification of the new SQAPP approval from the CLCOR via e-mail.

Deliverables: Work plan and monthly progress and financial reports, Summary of Quality Assurance Activities and Issues by Work Assignment.

#### **Task 1 - Technical support for the Water Pollution Control Grant Program Allocation Models**

The contractor shall support EPA in updating and maintaining the state and tribal water pollution control grant allocation formulas and models. The state formula is found in 40 Code of Federal Regulations Part 35 and is further impacted by the issuance of annual appropriations and national guidance. The EPA requires technical support in updating and maintaining the models and generating targets and alternative funding for state, interstates and Regional allocations for tribal programs for FY 2019 - 2021.

##### *Subtask 1.1 – Revisions to the State in Interstate Integrated Allocation Models*

The contractor shall provide technical support to EPA in implementing revisions to the current integrated allocation model. As required by regulation (40 CFR Part 35.162), the data in the variable portion of the state and interstate allocation models will be updated at a minimum, every 5 years but could be updated more frequently if requested by states or interstates. The model uses existing data as outlined in Table 1 of the regulations. The contractor shall, as needed, develop final FY 2019 state, interstate, and tribal allocations and projections for additional years. Support for this subtask shall include: (a) conducting

comprehensive quality assurance/quality control (QA/QC) review of the model, the programming, and its functionality to ensure correct operation and report generation; (b) reprogramming of the model to incorporate modifications to the state, interstate, and regional tribal formula per any revisions to part 35 regulations and issuance of national guidance, and (c) conducting update of data in the model, including available impairment data.

#### *Subtask 1.2 – Technical Support for Allocation Options*

The contractor shall provide EPA with technical support to develop and implement options for allocating increased or decreased funding for the water pollution control grant program under EPA's FY 2019 through FY 2021 proposed budgets. For planning purposes, it is anticipated that the contractor shall develop and implement approximately six (6) options for allocating funding in this period of performance.

#### *Subtask 1.3 – Preparation of Informational Materials*

The contractor shall provide technical support to prepare informational materials to communicate changes in resource data, allocations, and resulting impacts to various audiences, such as EPA Headquarters and Regional Program Managers, states, tribes, interstates, Congress, and the general public. EPA anticipates the development of one (1) informational material of approximately 1-3 pages in length. The contractor shall provide a draft of the document to the EPA WACOR for review and comment. Upon the receipt of comments by the EPA WACOR, the contractor shall finalize the document.

### **Task 2 - Provide technical and analytical support for the Tribal Program under the Water Pollution Control Grant Program**

OWM has responsibility for managing a tribal set-aside program under the water pollution control grant program. This tribal set-aside program provides support for "treatment in a manner similar to a state" (TAS) approved tribes to implement water quality management programs.

Upon the receipt of written technical direction from the EPA WACOR, the contractor shall provide technical support in addressing issues arising from the implementation of the 2007 Tribal Guidance. Assistance may include: (1) assessing tribal compliance with the guidance, (2) evaluating the status of tribal development of water pollution control programs, (3) evaluating the guidance and supplemental documents to determine if revisions are needed due to proposed regulatory actions including: the Reinterpretation of the Clean Water Act (CWA) TAS Provision and the TAS for Purposes of Section 303(d) of the CWA, (4) information to support the Section 106 Program portion of the OW Tribal Strategy, as needed (5) evaluation of tribal assessment activities, (6) supporting regional training, and (6) communications/outreach materials highlighting the accomplishments of the program.

**Task 3 – Support for Tribal Workshops** – Tribal Water Quality Workshops will be conducted in Region 5 and Region 9 during the Fall/Winter of 2018/19. These workshops will focus on tribal water quality management including biological/chemical/physical data collection, field work, water quality standards development and programmatic upkeep.

#### *Subtask 3.1 – Logistical Support for Region 5 Tribal Workshop*

This workshop is being held at the Forest County Potawatomi Community October 2-4 with 80 - 100 attendees. The contractor shall provide technical and logistical support in developing a web site for online registration and for posting of support materials including: four (4) one-

hour conference calls with the workshop workgroup, developing and testing the website, developing and managing registration with information on name, affiliation tribal or other, address, email and phone.

*Subtask 3.2 – Logistical Support for Region 9 Tribal Workshop*

The 1-week Tribal Water Quality Standards Academy (workshop) will be held in the Fall/Winter 2018/19. Location is still to be determined. There will be approximately 100 tribal participants. The contractor shall provide technical and logistical support for online registration and for posting of support materials including: four (4) one-hour conference calls with the workshop workgroup to develop the agenda, assistance in development and testing the website, developing and managing registration with information on name, affiliation tribal or other, address, email and phone. The contractor will also print and assemble 20-25 binders. Each binder will include an agenda, presentation and exercise materials not to exceed 250 pages. All presentations and exercises will be provided to the contractor in electronic form.

**IV. SCHEDULE OF DELIVERABLES:**

<b>TASK No.</b>	<b>DELIVERABLE</b>	<b>DATE DUE TO EPA</b>
<b>Task 0: Workplan Submission</b>		
	Workplan, budget, and identify revisions needed for QA supplemental document	According to contract.
	Make revisions to existing PQAPP, if needed	Within 30 days of WP approval
	Monthly progress reports	Monthly per contract requirements
<b>Task 1: Technical support for the Water Pollution Control Grant Allocation Models</b>		
	Update data in the Model if requested by states	As requested by WACOR
	Provide Model Runs	Within one week of technical direction to support potential allocation scenarios, the President's Budget and the Appropriation by Congress
	Provide informational materials	Within 3 weeks of WACOR request
<b>Task 2: Provide technical and analytical support for the Tribal Program under the Water Pollution Control Grant Program</b>		
	Support tribal guidance implementation including evaluating the existing guidance for conformance with 2 proposed rulemakings and evaluating tribal assessment activities.	As requested by WACOR
	Support regional training efforts through training session development.	As requested by WACOR
<b>Task 3 – Support for Tribal Workshops</b>		
<i>Logistical Support for Region 5</i>	Participate in four (4) conference calls	As scheduled by COR

<i>Tribal Workshop</i>		
	Develop and test website including registration site	Within 20 days of technical direction
	Post materials on website	Within 3 days of receipt
<i>Logistical Support for Region 9 Tribal Workshop</i>	Participate in four (4) conference calls	As scheduled by COR
	Develop and test website including registration site	Within 20 days of technical direction
	Print and assemble binders	Within 1 week of receipt of electronic files
	Post materials on website	Within 3 days of receipt

## **V. MISCELLANEOUS**

### **Software Application Files and Accessibility**

Software Application files, if delivered to the Government, shall conform to the requirements relating to accessibility as detailed to the 1998 amendments to the Rehabilitation Act, particularly, but not limited to, § 1194.21 Software applications and operating systems and § 1194.22 Web-based intranet and internet information and applications. See: <http://www.section508.gov/>

Preferred text format:	MS Word, 8.0 or higher (Office 2003 or higher)
Preferred presentation format:	Power Point, Office 2003 or higher
Preferred graphics format:	Each graphic is an individual GIF file
Preferred portable format:	Adobe Acrobat, version 6.0

## **VI. TRAVEL**

Travel is not anticipated under this work assignment.

## **VII. MEETINGS, CONFERENCES, TRAINING EVENTS, AWARD CEREMONIES AND RECEPTIONS**

The two workshops supported by this work assignment are being developed as part of grants and do not meet the definition of an EPA conferences. EPA spending will not meet the spending criteria (currently \$20,000) which requires completion of a 5170 approval.

## **VIII. CONTRACTOR IDENTIFICATION**

Contractor personnel shall always identify themselves as contractor employees by name and organization and physically display that information through an identification badge. Contractor personnel are prohibited from acting as the Agency's official representative. The contractor shall refer any questions relating to the interpretation of EPA policy, guidance, or regulation to the CO, CLCOR and/or WACOR.

## **IX. PRINTING**

All copying and printing shall be accomplished within the limitations of the printing clause of the contract.

#### **X. Technical Direction**

The Contract level COR or an authorized individual is permitted to provide technical direction, such as the WA COR or in their absence the Alt. WA COR. Technical direction must be within the scope of the statement of work and includes: (1) Direction to the contractor which assists the contractor in accomplishing the Statement of Work, (2) Comments on and approval of reports or other deliverables. Technical direction will be issued in writing or confirmed in writing within five (5) calendar days after verbal issuance. One copy of the technical direction memorandum will be forwarded to the Contracting Officer and the Contract Level Contracting Officer Representative.

#### **XI. Quality Assurance Surveillance Plan**

All task(s) identified in the performance work statement above are subject to review and approval by the EPA WACOR based on the general guidelines of the contract quality assurance surveillance plan regarding: Programmatic, cost control, schedule, and document development standards.

<b>EPA</b> United States Environmental Protection Agency Washington, DC 20460 <b>Work Assignment</b>						Work Assignment Number 3-03				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-C-15-022			Contract Period   09/01/2015   To   06/30/2019 Base                      Option Period Number       3			Title of Work Assignment/SF Site Name Healthy Watersheds Protection				
Contractor Cadmus Group LLC, The					Specify Section and paragraph of Contract SOW 3.2, 3.4, 4.2.1, 4.2.3, 6.2.3, 6.2.5, 6.3.2, 7.6					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance  From   07/01/2018   To   06/30/2019					
Comments: Immediate start is authorized for this work assignment but work shall not commence until 7/1/2018.										
<input type="checkbox"/> Superfund                      Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
SFO <input type="checkbox"/> Note: To report additional accounting and appropriations date use EPA Form 1900-69A. (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 0				
09/01/2015 To 06/30/2019										
This Action:						4,700				
Total:						4,700				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee			LOE:			
Cumulative Approved:				Cost/Fee			LOE:			
Work Assignment Manager Name   Douglas Norton  <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number: 202-566-1221 FAX Number:			
Project Officer Name   Nancy Parrotta  <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number: 202-564-5260 FAX Number:			
Other Agency Official Name   Lisa Mitchell-Flinn  <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number: 513-487-2852 FAX Number:			
Contracting Official Name   Angela Lower  <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number: 513-487-2036 FAX Number:			

**PERFORMANCE WORK STATEMENT**  
**Cadmus EP-C-15-022**  
**Work Assignment No. 3-03**  
**Period of Performance: 7/1/18-6/30/19**  
**PWS for Option Period 3**

**I. ADMINISTRATIVE:**

**A. Title: Recovery Potential Screening and Healthy Watersheds Protection**

**B. Work Assignment Contracting Officer's Representative (WACOR):**

Douglas J. Norton (4503T)  
Office of Wetlands, Oceans and Watersheds  
1200 Pennsylvania Ave NW  
Washington, DC 20460  
[norton.douglas@epa.gov](mailto:norton.douglas@epa.gov)  
202-566-1221

**Alternate Work Assignment Contracting Officer's Representative (WACOR):**

Miranda Chien-Hale (4503T)  
Office of Wetlands, Oceans and Watersheds  
1200 Pennsylvania Ave NW  
Washington, DC 20460  
[chien-hale.miranda@epa.gov](mailto:chien-hale.miranda@epa.gov)  
202-566-0401

**C. Quality Assurance:**

The tasks in this work assignment do require secondary environmental data compilation. In particular, the following tasks utilize data and will be addressed by a SQAPP:

**Task 1 – Watershed indicator data development and management**

**Task 2 – RPS Tool development and maintenance**

**Task 3 – Watershed assessment technical support projects**

**Task 4 – Healthy watersheds protection and partnering studies**

Consistent with the Agency's quality assurance (QA) requirements, the contractor shall supplement the Contract Level Quality Assurance Project Plan (QAPP) with a Supplemental Quality Assurance Project Plan (SQAPP). As these same tasks have been supported by the contractor in Option year 2, the previous, finalized SQAPP exists and remains sufficient in scope to address Option year 3 QA requirements with only minor updates. The contractor shall implement this existing SQAPP update after addressing revisions provided by the EPA WACOR as necessary for QAC and QAO approval. The contractor shall immediately notify the CL COR and WA COR of any significant QA issues, and how they are being resolved addressed, in the monthly progress reports as specified below under Task 0. For deliverables utilizing geospatial datasets, quality assurance and metadata support should adhere to Agency approved Geospatial procedures and standards, see: <https://www.epa.gov/geospatial/geospatial-policies-and-standards>.

**D. Background:**

This Work Assignment will support EPA's watershed technical assistance through Recovery Potential Screening (RPS) and Healthy Watersheds (HW) protection efforts in the water quality-related programs active in states, river basins and other geographical areas. Contractor-assisted RPS/HW support from EPA to states, territories, tribes, federal and multi-agency partnerships and other water program partners has involved projects in most states during the past year in this contract and the past several

years via other past contracts. Many additional projects are anticipated during the coming project period due to EPA support of state priority-setting among their watersheds, increasing availability of national data on watershed health, acting on opportunities for data and tool improvements, and collaborating with additional EPA and state water programs such as wetlands, drinking water/source water protection, and estuaries, when such programs express interest in using RPS and HW data, tools and methods.

Recovery Potential Screening (RPS) is a technical assessment method for systematically comparing relative restorability among many different impaired waters or watersheds based on multi-metric indices drawn mostly from landscape and monitoring data. The screening is often performed to identify more restorable waters that are good candidates for restoration, but the RPS method can be customized to a very wide variety of comparative assessment and decision support uses. In virtually all applications, RPS relies on comparing numerous attributes georeferenced to the watershed units of one, well-established national geospatial dataset, the Hydrologic Unit Code (HUCs). Using attributes of a single geospatial unit and widely-used dataset simplifies and speeds up watershed assessment, as compared to complex analyses of multiple geospatial datasets.

Healthy Watersheds Assessment (HW) is very similar in that it also compares large numbers of watersheds across whole states and other large areas, using geospatial attributes and methods identical to RPS. Whereas analyzing healthy watersheds is one of many purposes to which RPS can be applied for watershed analysis and comparison, HW is more specific to watershed health in particular, and HW assessments generally support protection efforts more so than restoration. HW support tasks also involve studying the application and relative success of protection techniques and watershed management approaches. These findings help inform ways for EPA, state and other partners to apply their HW assessments in more effective protection approaches. HW assessments draw from the same indicator data as RPS and use the same analytical protocols, tools and QA/QC, thus EPA's support projects frequently include both HW and RPS. RPS/HW is applicable to a wide range of activities across water programs, for example: setting priorities among 303(d) listed waters in watersheds; determining the prioritized schedule of Total Maximum Daily Load (TMDL) development; setting priorities for TMDL implementation; setting priorities and detecting risks to drinking water source areas; evaluating pollution control grant proposals; and developing other restoration and protection strategies. RPS/HW tools and data have already been utilized in 37 states and territories, and thoroughly documented in EPA websites (see [www.epa.gov/rps](http://www.epa.gov/rps), [www.epa.gov/hwp](http://www.epa.gov/hwp) and [www.epa.gov/wsio](http://www.epa.gov/wsio)). RPS tools have been developed for all 50 states and are being completed for all US territories; nearly all also contain HW health and vulnerability indicators.

Many RPS/HW projects are comprehensive, multi-purpose statewide or large-area efforts in which EPA and its contractor help the state or other partner plan intended uses of RPS/HW, identify appropriate metrics, gather and measure data, develop broadly applicable watershed analysis tools for the project area, demonstrate RPS/HW techniques in workshops, and transfer RPS/HW tools and data products. Projects also can be more narrowly defined, as in a demonstration of RPS/HW as a general framework for managing nitrogen and phosphorus pollution. Either or both types of project may require support under this Work Assignment. Because RPS/HW services are widely in demand, it is also proven efficient to develop multi-state or even national data and tools rather than separately repeat data and tool development one state at a time. For this reason, the Work Assignment also contains national data, assessment and tool development support to augment single state projects and make them more efficient. In addition, the development of training materials, outreach venues such as web materials, and background studies on effective application of watershed restoration and protection policies is



included as general, national activity that ultimately also supports state-specific and project-specific needs.

## **II. OBJECTIVE:**

The contractor shall support the priorities and requirements of the work assignment as described below. The primary goal of this WA is to help EPA provide technical data, tools, and assistance to state (and other partners') water-relevant programs that need to systematically set priorities at a watershed level for best results. Below is a set of descriptions of tasks under this Work Assignment (WA) that are designed to address this objective. The contractor shall provide RPS/HW support to EPA as described in the Tasks below. All deliverables must be in an electronic format supportable by EPA at the end of the period of performance for this Work Assignment. Any deliverable that will be accessible by the public shall comply with EPA Section 508.

This work will be completed commensurate with Sections 3.2, 3.4, 4.2.1 through 4.2.3, 6.2.3, 6.2.5, 6.3.2 and 7.6 of the Contract Level PWS. The level of effort estimated for this work assignment is 4700 hours.

## **III. TASK DETAILS:**

The contractor shall perform the following tasks:

### **Task 0 - Work Plan, SQAPP and Monthly Reporting (est. 5% of WA total effort):**

The contractor shall prepare a detailed work plan and budget for the accomplishment of the indicated tasks in accordance with the clause Work Assignments (EPAAR 1552.211-74). The work plan shall include a description of (a) proposed staff, (b) the number of hours and labor classifications proposed for each task, broken down to task level, to include both prime contractor and subcontractor labor, and (c) a list of deliverables, with due dates and schedule for deliverables.

In addition, the work plan shall specify that a Supplemental Project Specific Quality Assurance Project Plan (SQAPP) appending the Contract Level Quality Assurance Project Plan (QAPP) is required. The contractor shall update and utilize to the fullest extent the already existing SQAPP from WA# 2-03 under this Work Assignment. In addition, the SQAPP will address as necessary the requirements noted at <https://www.epa.gov/geospatial/geospatial-policies-and-standards>. Applicable, existing SQAPP update materials about EPA shall be provided by the EPA WACOR, and the contractor shall add as necessary any other SQAPP updates. All QA documentation prepared under this WA shall be considered non-proprietary, and shall be made available to the public upon request. The contractor shall immediately notify the EPA WACOR of any QA problems encountered that may impact performance with recommendations for corrective action.

This task also includes monthly progress and financial reports, which are to be submitted pursuant to the contract. Monthly financial reports must include a table with the invoice level of effort (LOE) and costs broken out by the tasks in this WA. The monthly progress report shall indicate, in a separate QA section, whether significant QA issues have been identified and how they are being resolved. The contractor shall immediately notify the EPA CLCOR and WACOR if any changes to the collection and analysis of the data are needed and prepare or modify the SQAPP accordingly.

The contractor shall immediately alert the EPA WACOR to any anticipated event under the work assignment which may result in incurring an estimated \$20,000 or more cost, funded by EPA, specific to that event (e.g., meeting or training). Those costs would include travel of prime and consultant personnel, planning and facilitation costs, audio/visual, and rental of venue costs. The EPA WACOR will prepare approval internal paperwork for the event and will advise the contractor when appropriate signatures have been obtained. At that point, effort can proceed for the event. If the event is being sponsored by another EPA organization, the organization providing the planning is responsible for the approval.

**Deliverables:** Work Plan, updated SQAPP document, and Monthly Reports.

### **Task 1 – Watershed indicator data development and management (25%).**

The primary form of data used in this WA is indicator measurements on a watershed basis (e.g., % of area in the watershed that is Urban), and thus compiling and analyzing indicator values is central to every RPS/HW project. Basically, watershed indicators shall be compiled on a project-specific (e.g., usually state-specific) scale or, where nationally consistent data sources are available, on a national scale to cover numerous states' watershed information needs with maximum efficiency. Both approaches are covered under this WA. The contractor shall compile, fully document and deliver to EPA watershed indicators at standard watershed scales (HUC12, HUC8, NHDplus Catchment, or other), both nationally and for project-specific geographic areas, under this Task.

Due to its long-standing history of supporting state watershed analysis with indicators and tools, EPA maintains a Watershed Index Online (WSIO) website at [www.epa.gov/wsio](http://www.epa.gov/wsio) that hosts a national library of watershed indicator data. This is the major source of indicators for RPS/HW projects on individual states, river basins or other areas. At WSIO, the indicators are stored in data tables georeferenced as attributes of the Watershed Boundary Database (WBD) HUC12 national snapshot, which is used as a standard by most EPA watershed projects. Although WSIO currently hosts only HUC12 data, watershed attributes at HUC8, catchment and potentially other scales shall be added to WSIO under this WA. Note that the hundreds of WSIO indicators are attributes of a very few, commonly used geospatial datasets that are already posted on the EPA geoplatform; thus this WA involves compiling and using attribute data tables rather than full geodatabases.

Under Task 1, the contractor shall continue to undertake a broad-based review of suitable watershed indicator sources and identify potential indicators that can be added to the WSIO data tables. Included in this review can be any existing WSIO indicators that are suggested for modification, update or deletion. This review shall include sources of potential indicators at HUC12, HUC8 and catchment scales. Contractor shall briefly identify in all cases the potential indicator name, watershed scale, data source, how measured, and a description including estimated effect on watershed condition and relevance to restoration or protection. This review and delivery of findings may be conducted incrementally throughout the project period.

After review of contractor findings, the EPA WACOR shall identify through technical direction those indicators that the contractor shall process and add to the WSIO attribute data. Many indicators may be available without modification at a useful scale, and others may require additional processing steps. The contractor shall compile a minimum of 50 new indicators at HUC12 scale and 100 indicators at HUC8 scale. Due to substantial existing and forthcoming new data, contractor shall

compile at least 500 indicators at catchment scale. These are all at conterminous US scale. Compilation of each indicator shall involve development of EPA's required metadata documentation, as well as related information routinely compiled in the WSI indicator tables.

For all indicator data to be housed in the WSIO, contractor shall meet as appropriate all EPA metadata requirements and previously established documentation and tracking information (i.e., the WSIO master tracking table) used for current WSIO indicators organization and maintenance. The existing tracking table addresses only HUC12 indicators, and can be used to continue organizing metadata at that scale. The indicator data at HUC8 and Catchment scales will require development of two additional tracking tables that are scale-specific. All delivered metadata tracking tables and data tables shall be in EPA-compatible electronic file formats, and shall meet as necessary EPA requirements for geospatial metadata. Further, if so directed, the contractor shall support the EPA WACOR with data publication and file formats needed to potentially publish WSIO data as RESTful Web Services or other appropriate EPA format.

On a project-specific level, the contractor shall also compile indicators for use in RPS/HW projects (as per Tasks 3 and 4). Many indicators in the WSI will have no additional processing needed, but others will be available only from state and affiliated sources and will require additional compilation effort to be brought into the same format as the WSI indicators for RPS/HW usage. The total number of project-specific indicator additions cannot be predicted with certainty at this time, but may average around 20 indicators per project. The contractor shall ensure that the compiled indicator data are processed into and/or compatible with the local RPS/HW tools as well as online RPS/HW tools that may be utilized in the screening analyses. Project-specific indicator data are generally not added to the WSIO unless national in coverage, so whereas these should meet metadata documentation requirements the WSIO tracking table requirements would not apply.

Indicator development also cuts across several other areas of the scope of this WA, including project-specific indicator development (Tasks 3 and 4), tool updates (Task 2) and indicator reference material development for technical outreach (Task 5). In these cases, any deliverables involving indicators are covered under those Task's deliverables instead of Task 1's deliverables.

**Deliverables:** review of potential additional watershed indicators; approximately 500 catchment metrics organized for national data management; approximately 150 new or modified HUC12 and HUC8 metrics delivered as national data; documentation that meets EPA geospatial requirements for metadata; new or updated national indicator tracking files for HUC12, HUC8 and catchment scale metrics.

## **Task 2 – RPS Tool development and maintenance (10%).**

RPS/HW projects typically involve assembly of watershed indicators into RPS Tools that support a wide variety of systematic comparisons among watersheds. EPA's RPS Tools have existed and been used for state water program support since 2005 and have been national in coverage (through state-specific tools) since 2014. Whereas Task 1 addresses the watershed indicators used in these comparisons, Task 2 addresses the analytical tools that house the project-specific indicators and provide the functionality to do systematic comparisons for water program support. These tools may vary in design and purpose but are all referred to here as RPS Tools. These tools are generally Excel

files specially coded to store watershed data values, use these data to calculate simple index values, and display tabular, graph and map image results.

Due to their extensive past history of use with states and others, the work involving RPS Tools is generally updating, revision and new version distribution of RPS Tools and their derivatives, rather than development of entirely new tools. The contractor may be tasked by technical direction to improve RPS Tool functionality; it can also become necessary for the contractor to troubleshoot and correct tool malfunctions that sometimes arise from Excel software updates and related causes. Further, as RPS Tools contain an embedded special selection of WSIO indicators that can become dated, new indicator data may become incrementally available to include in RPS Tools.

Under Task 2, the contractor shall develop and test any necessary improved tool functions and then update and reissue the national set of RPS tools for all states and territories at least once during the project period, or twice if by technical direction from the EPA WACOR. The contractor shall also update or provide design inputs to derivatives of the RPS Tool (e.g., the generic RPS Tool, WSIO Tool) and the RPS Tool user manual up to two times during the project period. Tool development or enhancement as part of project-specific (e.g. state-specific) activities shall be considered part of the deliverables of Task 3 and 4.

**Deliverables:** Up to two national updates of all state and territory tools; up to two updates of RPS tool user guide and generic RPS tool; technical design contributions to RPS Tool derivatives such as the WSIO tool; tool enhancements or troubleshooting for any of the above tools if technically directed.

### **Task 3 – Watershed assessment technical support projects (25%).**

Under Task 3, this WA involves using watershed indicators and tools to provide specific support to individual projects involving EPA regions, states/tribes/territories and other collaborators involved in achieving water quality program purposes. Most RPS/HW support involves some degree of watershed comparative screening analysis by the contractor as expert assistance to the state. Projects can sometimes be limited to custom tool development and related data compilation and addition to the tool. The most common type of project is likely to be a statewide screening and comparison of watersheds using Excel-based RPS Tools, based on a specific theme of interest (e.g., a common pollutant of concern; a set of watersheds of specific value or interest; a set of restoration or healthy watersheds protection options in need of a strategy and priority order).

As all 50 states and many of the larger river basins have been given the opportunity to receive RPS/HW support from EPA due to more universally available data and tools, and new requests can come at any time, the list of the states and others to be supported under this task cannot be specified in advance. Currently active requests that arose during option year 2, for example, include MI, NJ, HI, NM, CT, KS, MS and the US Territories. State, river basin or other geographic area project requests may also involve EPA cross-program collaboration, such as involving EPA national or regional drinking water source protection, impaired waters, nonpoint source, wetlands or other water-relevant theme. No state, region or other geographic area (such as US lands addressed by other EPA or federal environmental programs) is precluded from possible involvement in an RPS/HW project.

The EPA WACOR initiates all RPS/HW analysis projects (e.g., for a specific state or other client) through written technical direction to the contractor. The contractor shall then design a summary of the approach to be taken to the analysis, and validates this with the WACOR and the state participants.

The contractor shall then carry out the analysis involving the RPS scoring tool or equivalent tool, and shall generate a state custom RPS tool and deliver RPS/HW tool copies of specific screening runs that are completed. The contractor products may include individual maps, rank-ordered tables, and bubble plot graphics as visual byproducts of the screening analyses. Ultimately, each project should yield analytical results and/or data and tools that meet the state's request, and these results shall be produced by the contractor in a format that can be transmitted to EPA and the state requestor. The EPA WACOR may include webinars or onsite workshops (see also Task 5) by written technical direction for any given project under Task 3.

Assistance projects may vary in size as approved by the WACOR, but are expected to generally involve 50 to 100 hours of effort to complete (not counting workshops or webinars, if also involved). Up to 15 RPS/HW state-specific support projects and up to 10 other (multi-state, river basin, or other geographic area) projects shall be completed by the contractor under this task.

**Deliverables:** up to 15 state-specific tools/projects using RPS and/or HW data and methods; up to 10 custom (non-state) tools/projects per option year.

#### **Task 4 – Healthy watersheds protection and partnering studies (25%).**

RPS/HW projects, indicators, and tools have included a growing number of healthy watersheds (HW) protection applications in recent years. RPS Tools were used by 12 states in identifying protection priorities for state water programs over the coming several years. A Preliminary Healthy Watersheds Assessment (PHWA) documenting watershed health and vulnerability was completed for the lower 48 states during 2015 and 2016. Multiple grants and other programs have funded specific protection projects around the country, and these have stimulated partnering among EPA surface waters programs, source water protection programs, and other agencies such as NRCS and USFS. Such efforts can be supported by analyses using the same kinds of watershed indicators and comparative tools. However, watershed data and analyses to support protection are less developed than those comparing impairment and restoration priorities.

As a newer growth area, the ability to support HW projects requires similar developmental efforts to those that led to the existing WSIO watershed indicators and RPS tools. Task 4 addresses this part of the WA in the form of further development of protection-relevant and health-relevant indicators and methods, based on what's needed to support states and other partners' watershed protection efforts. This shall also involve compiling and evaluating available information on state protection priorities, protection approaches, and potential partners, and evaluation of existing work done to estimate healthy watersheds condition and vulnerability. All of the above provide important background insight that will support the development of improved, protection program-relevant indicators and methods.

Under Task 4, the contractor shall continue to support existing EPA analysis of states' watershed vulnerability and health (i.e., condition), building upon the results of the PHWA, as requested by states or other partners and authorized through EPA WACOR's technical direction. Such activities may enhance or improve PHWA results and provide project partners with better characterization of watershed condition. Products from these activities may be considered part of Task 3's project-specific deliverables and are not listed separately in Task 4 deliverables. Also in Task 4, the contractor shall use multiple studies and data sources that characterize watershed condition to compare with and validate PHWA results. This effort shall be compiled in a draft and final report, which shall be reviewed by the EPA WACOR; review comments on draft and final versions shall be addressed by the contractor.

Task 4's watershed protection theme will involve building better understanding of how programs (e.g., under Clean Water Act CWA or Safe Drinking Water Act SDWA) and statutory authorities can be used to protect high quality waters and watersheds. The contractor shall review such programs and identify the ways they are successfully used by states and other partners to accomplish watershed protection. Two such reviews of importance in 2018 include a review of protection opportunities and practices under SDWA and a review of the status of protection efforts in state programs associated with CWA Section 319, nonpoint source control. Also under Task 4, the contractor shall compile information on state agencies and other state partners involved in the protection of watersheds and high quality waters, their approaches, and where they are active. This may include, for example, state DNRs or DEQs, state parks agencies and fisheries programs, nonpoint source or watershed restoration and protection programs, and related federal and non-governmental organizations. Generally, these studies shall be conducted on single states or EPA Regions and findings compiled into brief summary reports. Up to five such studies shall be completed.

Further, in this Task the contractor shall use PHWA, RPS, WSIO and similar data on health and vulnerability to characterize and summarize different programmatic efforts to protect high quality

waters and watersheds. These areas subject to protection may include but are not limited to the areas involved in applications for Healthy Watersheds Consortium Grants, the areas flagged for protection priorities by state 303(d) programs, and healthy watersheds priority areas flagged by Chesapeake Bay watershed states. This effort shall be compiled in a draft and final report, which shall be reviewed by the EPA WACOR; review comments on draft and final versions shall be addressed by the contractor. Additional analyses of programmatic protection efforts may be authorized through technical direction by the EPA WACOR.

**Deliverables:** draft and final technical document on validating watershed condition assessment; up to five summary documents synthesizing watershed protection techniques, approaches and organizations; draft and final technical document detailing the status of CWA Section 319 protection efforts; draft and final technical document relating state and other protection projects to watershed condition attributes.

**Task 5 – RPS and healthy watersheds technical training and outreach (10%).**

As they involve significant communications and technical information transfer with states and others, RPS/HW projects contain a technical training and outreach component. Three closely related EPA websites have supported these activities and helped inform state and other users for several years: see [www.epa.gov/wsio](http://www.epa.gov/wsio) , [www.epa.gov/rps](http://www.epa.gov/rps) and [www.epa.gov/hwp](http://www.epa.gov/hwp). These sites host indicator data and metadata, tools, methodological steps, and background information on watersheds and indicators. State-specific projects very often involve webinars and/or onsite workshops in which hands-on demonstration of RPS/HW tools and analyses occur. Technical presentations for states and others occur at major workshops and conferences, and technical papers have been developed to communicate about RPS and HW to broader audiences. Task 5 covers these technical training and outreach activities.

Under Task 5, the contractor shall support changes as required by the EPA WACOR to correct or improve website content related to RPS/HW support. The RPS, HW and WSIO websites contain a variety of technical tools and data designed to help states assess and compare their watersheds. These resources include but are not limited to: screening methodology directions, recovery potential indicators lists, indicator reference sheets, a recovery literature database, results plotting tools, index calculation tools, screening project reports and papers, and links to related tools from other websites. When authorized through technical direction, the contractor shall develop content updates, section-by-section replacements or additions to the website in formats that can be reviewed and approved by the EPA WACOR and then transferred to the EPA website by the WACOR or other qualified editor. Note that, since EPA's adoption of the Drupal content management system for its websites, the contractor may support content development of web resources as described above, but cannot be tasked to directly edit or modify the EPA website.

When a state's request is simple and narrow in scope and the state possesses some expertise in watershed screening and comparison with RPS/HW or other tools, these types of support may be provided through conference calls and webinars. The contractor shall support webinar-assisted projects by hosting the webinar and communicating with participants about schedule and agenda; developing any RPS/HW materials needed in advance of the webinar; and developing a webinar summary product (e.g., agenda and slide decks) and transferring contractor-generated materials to the WACOR and the state. Up to 20 webinars of 1 to 3 hrs each shall be supported under Task 5.

In cases where an RPS/HW workshop is directed by the EPA WACOR, the contractor shall organize and



support the workshop in the following manner: Coordinate optimum scheduling and state onsite facility arrangements; prepare agenda, handouts and presentation materials; arrange travel for one or two RPS/HW experts (one geospatial) to a state hosted location; facilitate the workshop, including compiling possible RPS/HW applications of interest to the state, providing hands-on training, and identifying relevant recovery potential metrics, data, and screening products; and develop a meeting summary product and transfer contractor-generated materials to the WACOR and the state. Up to 5 one to two-day workshops involving two contractor personnel shall be supported under Task 5.

Also under Task 5, the contractor shall participate in preparation and delivery of presentations and technical papers in conferences or other venues such as workshops or technical journals. Such presentations and documents shall be based on RPS/HW analyses, data, tools, and findings as related to water and watersheds programs. Technical papers may require multiple revisions and outside reviewers. Participation of one to two contract staff in up to three conferences, and development of up to two technical papers, shall be supported through Task 5.

**Deliverables:** incrementally developed revised or new web content for EPA watershed websites; up to 20 webinars; up to 5 onsite workshops; up to 3 technical conference presentations and 2 technical documents concerning the subject of this work assignment.

#### IV. SCHEDULE OF DELIVERABLES:

Specific deliverables, by Task, are detailed in the table below. Details of this work will be communicated by periodic updates of technical direction.

TASK No.	DELIVERABLE	DATE DUE TO EPA
<b>Task 0 - Workplan Submission</b>		
	Workplan and budget	According to contract
	SQAPP update	Within 30 days of Work Plan acceptance.
	Monthly progress reports	Monthly
<b>Task 1 - Watershed indicator data development and management</b>		
	review of potential additional watershed indicators	Incrementally through WA duration
	National data tables for approximately 50 HUC12 metrics organized for national data management	Incrementally through WA duration
	National data tables for approximately 100 HUC8 metrics organized for national data management	Incrementally through WA duration
	National data tables for approximately 500 catchment metrics organized for national data management	by April 1, 2019
	Metadata documentation meeting EPA requirements	Sept 30, 2018 and then incrementally for new products
	National indicator tracking files for HUC12, HUC8 and catchment scale indicators	Within 30 days of national data tables delivery
<b>Task 2 – RPS Tool development and maintenance</b>		



one national update of all state and territory RPS Tools	By September 1, 2018
one update of RPS tool user guide and generic RPS tool	By August 1, 2018
technical design contributions to RPS Tool derivatives; tool enhancements or troubleshooting	If issued written technical direction
<b>Task 3 – Watershed assessment technical support projects</b>	
up to 15 state-specific tools/projects using RPS and/or HW data and methods	180 days after technical direction initiating specific project
up to 10 custom tools/projects using RPS and/or HW data and methods	180 days after technical direction initiating project
<b>Task 4 – Healthy watersheds protection and partnering studies</b>	
draft and final technical document on validating watershed condition assessment	By December 1, 2018
up to five summary documents synthesizing state watershed protection approaches and organizations	Incrementally through duration of WA
draft and final technical document detailing the status of CWA Section 319 protection efforts	By December 1, 2018
draft and final technical document relating state and other protection projects to watershed condition attributes	By May 1, 2019
<b>Task 5 – RPS and healthy watersheds technical training and outreach</b>	
new web content for EPA watershed websites	If issued written technical direction
up to 20 webinars	Incrementally through duration of WA
up to 5 onsite workshops	Incrementally through duration of WA
up to 3 technical conference presentations and 2 technical documents	Incrementally through duration of WA

## V. MISCELLANEOUS:

### **Software Application Files and Accessibility:**

Software application files, if delivered to the Government, shall conform to the requirements relating to accessibility as detailed to the 1998 amendments to the Rehabilitation Act, particularly, but not limited to, § 1194.21 Software applications and operating systems and § 1194.22 Web-based intranet and internet information and applications. See: <http://www.section508.gov/> The EPA WACOR shall identify which of delivered products will require 508 compliance.

Regarding FITARA, online publications of maps will leverage EPA's GeoPlatform technical architecture, hardware and software, to the fullest extent possible for public search and discovery. Quality assurance and metadata support should adhere to Agency approved Geospatial procedures and standards, see: <https://www.epa.gov/geospatial/geospatial->

policies-and-standards. All geospatial metadata will, as required by OMB, be published in EPA's Environmental Data Gateway which serves Data.gov, see:  
<https://edg.epa.gov/metadata/catalog/main/home.page>

Preferred text format:	MS Word 8.0 or higher (Office 2007 or higher)
Preferred presentation format:	Power Point, Office 2007 or higher
Preferred graphics format:	Each graphic is an individual GIF file
Preferred portable format:	Adobe Acrobat, version 6.0
Preferred technology:	ESRI ArcGIS Desktop 10.4 or higher

## **VI. TRAVEL**

Travel to the destinations listed will require approval of the WACOR and CL-COR per contract requirements. If destinations change the contractor will be notified by the WACOR and new destinations provided as needed through written technical direction. Contractor travel will be necessary in the completion of this WA's tasks. An estimated 18 person-trips averaging two nights each is anticipated. For clarity, the following does not represent 18 separate trips; some trips will require two contractors traveling at once to each stated location. For planning purposes these trips shall include the following destinations:

Destination		Tasks Supported
Washington DC	(8)	all
San Juan, PR	(2)	3, 4, 5
Atlanta GA	(2)	all
Denver CO	(2)	3, 4, 5
Shepherdstown, WV	(2)	3, 4, 5
Edison, NJ	(2)	3, 4, 5

## **VII. MEETINGS, CONFERENCES, TRAINING EVENTS, AWARD CEREMONIES AND RECEPTIONS**

All appropriate clearances and approvals required by Agency policy in support of any and all conference related activities and expenses, including support of meetings, conferences, training events, award ceremonies and receptions, including the form 5170 for all meetings costing more than \$20,000, shall be obtained by the EPA CL-COR as needed and provided to the Contracting Officer (CO). Work under conference related activities and expenses shall not occur until this approval is obtained and provided by the EPA CL-COR.

## **VIII. CONTRACTOR IDENTIFICATION**

Contractor personnel shall always identify themselves as contractor employees by name and organization and physically display that information through an identification badge. Contractor personnel are prohibited from acting as the Agency's official representative. The contractor shall refer any questions relating to the interpretation of EPA policy, guidance, or regulation to the CO, CL-COR and/or WACOR.

## **IX. PRINTING**

All copying and printing shall be accomplished within the limitations of the printing clause of the contract.

**X. Technical Direction**

The Contract level COR or an authorized individual, such as the WACOR or Alt. WACOR is permitted to provide technical direction. Technical direction must be within the scope of the statement of work and includes: (1) Direction to the contractor which assists the contractor in accomplishing the Statement of Work, (2) Comments on and approval of reports or other deliverables. Technical direction will be issued in writing or confirmed in writing within five (5) calendar days after verbal issuance. One copy of the technical direction memorandum will be forwarded to the Contracting Officer and the Contract Level Contracting Officer Representative.

**XI. QUALITY ASSURANCE SURVEILLANCE PLAN:**

All task(s) identified in the performance work statement above are subject to review and approval by the EPA WACOR based on the general guidelines of the contract quality assurance surveillance plan regarding: Programmatic, cost control, timeliness/deliverables, and document development standards.

<b>EPA</b> United States Environmental Protection Agency Washington, DC 20460 <b>Work Assignment</b>						Work Assignment Number 3-03				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000001				
Contract Number EP-C-15-022			Contract Period 09/01/2015 To 06/30/2019			Title of Work Assignment/SF Site Name				
			Base                      Option Period Number                      3			Healthy Watersheds Protection				
Contractor Cadmus Group LLC, The					Specify Section and paragraph of Contract SOW 3.2, 3.4, 4.2.1, 4.2.3, 6.2.3, 6.2.5, 6.3.2, 7.6					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance  From 07/01/2018 To 06/30/2019					
Comments: The purpose of this amendment 1 to Cadmus (EP-C-15-022) WA 3-03 is to change the wa-cor from Doug Norton to Miranda Chien-Hale and to make an adjustment to Task 5 to allow the contractor to provide support to directly edit or modify drafts of web pages in the EPA website.										
<input type="checkbox"/> Superfund					Accounting and Appropriations Data					<input checked="" type="checkbox"/> Non-Superfund
SFO <input type="checkbox"/> (Max 2)                      Note: To report additional accounting and appropriations date use EPA Form 1900-69A.										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 4,700				
09/01/2015 To 06/30/2019										
This Action:						0				
Total:						4,700				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee		LOE:				
Cumulative Approved:				Cost/Fee		LOE:				
Work Assignment Manager Name    Miranda Chien-Hale						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number: 202-566-0401				
						FAX Number:				
Project Officer Name    Nancy Parrotta						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number: 202-564-5260				
						FAX Number:				
Other Agency Official Name    Lisa Mitchell-Flinn						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number: 513-487-2852				
						FAX Number:				
Contracting Official Name    Kathleen Rechenberg						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number: 513-487-2853				
						FAX Number:				

**EPA**United States Environmental Protection Agency  
Washington, DC 20460**Work Assignment**

Work Assignment Number

3-04

☐ Other ☐ Amendment Number:

Contract Number

EP-C-15-022

Contract Period 09/01/2015 To 06/30/2019

Base

Option Period Number 3

Title of Work Assignment/SF Site Name

DC Water Syst Direct Implement

Contractor

Cadmus Group LLC, The

Specify Section and paragraph of Contract SOW

2.5, 2.0, 3.2, 3.4, 6.0, 7.0, 8.2, 8.3

Purpose:



Work Assignment



Work Assignment Close-Out



Work Assignment Amendment



Incremental Funding



Work Plan Approval

Period of Performance

From 07/01/2018 To 06/30/2019

Comments:

Immediate claim is authorized but work shall not commence until 7/1/2018.



Superfund

## Accounting and Appropriations Data



Non-Superfund

SFO  
(Max 2)

Note: To report additional accounting and appropriations data use EPA Form 1900-69A

Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code
1										
2										
3										
4										
5										

## Authorized Work Assignment Ceiling

Contract Period:

Cost/Fee:

LOF

09/01/2015 To 06/30/2019

This Action:

Total

## Work Plan / Cost Estimate Approvals

Contractor WP Dated:

Cost/Fee

LOE:

Cumulative Approved:

Cost/Fee

LOE

Work Assignment Manager Name Patti-Kay Wisniewski

Branch/Mail Code:

Phone Number: 215-814-5668

FAX Number: 215-814-2318

(Signature)

(Date)

Project Officer Name Nancy Parrotta

Branch/Mail Code:

Phone Number: 202-564-5260

FAX Number:

(Signature)

(Date)

Other Agency Official Name Lisa Mitchell-Flinn

Branch/Mail Code:

Phone Number: 513-487-2852

FAX Number:

(Signature)

(Date)

Contracting Official Name Angela Lower

Branch/Mail Code:

Phone Number: 513-487-2036

FAX Number:

(Signature)

(Date)

5/15/18

## **PERFORMANCE WORK STATEMENT**

**Cadmus EP-C-15-022**

**Work Assignment No. 3-04**

**(July 1, 2018 - June 30, 2019)**

**I. ADMINISTRATIVE:** These tasks are authorized by the Contract Level Performance Work Statement sections 1.5, 2.0, 3.2, 3.4, 6.0, 7.0, 8.2, and 8.3.

**A. Title: District of Columbia Water Systems Direct Implementation Support**

**B. Work Assignment Contracting Officer's Representative (WACOR)**

Patti Kay Wisniewski  
Drinking Water Branch  
U.S. Environmental Protection Agency (EPA)  
1650 Arch Street  
Mail Code 3WP21  
Philadelphia, PA 19103-2029  
Phone: 215-814-5668  
Fax: 215-814-2302  
Email: [wisniewski.patti-kay@epa.gov](mailto:wisniewski.patti-kay@epa.gov)

**Alternate WACOR**

Heather Arvanaghi  
Drinking Water Branch  
U.S. Environmental Protection Agency (EPA)  
1650 Arch Street  
Mail Code 3WP21  
Philadelphia, PA 19103-2029  
Phone: 215-814-5477  
Fax: 215-814-2302  
Email: [arvanaghi.heather@epa.gov](mailto:arvanaghi.heather@epa.gov)

**C. Quality Assurance:**

Task(s) 6, 7 and 9 in this work assignment require quality assurance (QA). Collection, use and analysis of data for these tasks will be identical to the parameters and procedures described in the approved Supplemental Project Specific Quality Assurance Project Plan (SQAPP) completed under task 0 of WA 0-04 and revised under WA 1-04. The project specific QA requirements must be addressed in the monthly progress reports as specified under Task 0, below.

**D. Background:**

EPA Region III is responsible for the direct implementation of the Public Water System Supervision (PWSS) Program in the District of Columbia (DC) and must review compliance data, oversee operational and research studies, provide technical assistance, and ensure the performance of sanitary surveys of the District's public water systems (PWSs).

As the primacy agency for the PWSS program in the District of Columbia, EPA Region III receives and reviews compliance data from six (6) regulated PWSs in DC. The Safe Drinking Water Act (SDWA) requires that sanitary surveys of PWSs be conducted periodically in order to ensure that these water systems comply with all regulations promulgated under the SDWA. EPA Region III uses contractor support to perform sanitary surveys of the PWSs in DC and for data management support. As needed, EPA Region III also provides technical assistance and training to regulated water systems and other water users in the District as well as regional staff.

## **II. OBJECTIVE:**

The Contractor shall provide assistance to EPA for program implementation, including: (1) support for workgroup conference calls; (2) development of resources for use in program implementation and evaluation; (3) conducting sanitary surveys of public water systems in DC and preparing reports; (4) providing support for SDWIS/State implementation and transition to SDWIS Prime; (5) providing program training; and (6) providing other technical support necessary for effective implementation of the Safe Drinking Water Act.

## **III. TASK DETAIL:**

The Contractor shall perform the following tasks:

### **Task 0 – Work Plan Submission**

The Contractor shall develop a work plan that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the contractor's key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. If a subcontractor(s) is proposed and subcontractors are outside the local metropolitan area, the Contractor shall include information on plans to manage work and contract costs.

In addition, the Contractor shall prepare a statement indicating that this WA is a continuation of WA 2-04. The work plan shall explain that any collection, use and analysis of data for Tasks 6, 7 and 9 in this work assignment will be identical to the procedures described in the approved SQAPP for the parameters currently described in the SQAPP.

This task also includes monthly progress and financial reports. Monthly financial reports shall be submitted per contract reporting requirements and must include a table with the invoice LOE and cost broken out by the tasks in this WA. The monthly progress report shall indicate, in a separate QA section, whether significant QA issues have been identified and how they are being resolved. The Contractor shall immediately notify the Contract Level Contracting Officer Representative (CLCOR) and Work Assignment Contracting Officer Representative (WACOR) if any changes to the tasks involving the collection and analysis of the data occurs, and prepare a new SQAPP supplementing the Contract QAPP accordingly. Work on these tasks cannot proceed until the Contractor receives notification of the revised/amended SQAPP approval from the CLCOR via e-mail.

The tasks under this work assignment do not require the acquisition of "off-site" facilities for conferences and meetings as defined in the IPN 12-05 and the events associated with this work assignment are not covered by EPA Order 1900.3 and do not require EPA Form 5170.

The Contractor shall immediately alert the WACOR to any anticipated event under the work assignment which may result in incurring an estimated \$20,000 or more cost, funded by EPA, specific to that event, meeting, training, etc. Those costs would include travel of both prime and consultant personnel, planning and facilitation costs, AV and rental of venue costs, etc. The EPA WACOR will then prepare approval internal paperwork for the event and will advise the Contractor when appropriate signatures have been obtained. At that point, effort can proceed for the event. If the event is being sponsored by another EPA organization, the organization providing the planning is responsible for the approval.

Deliverables: Work plan and monthly progress and financial reports, Checklist for Quality Assurance Project Plans, Summary of Quality Assurance Activities and Issues by Work Assignment.

#### **Task 1 – Technical Expert Working Group (TEWG) Support**

The Contractor shall participate in, and prepare notes for three (3) TEWG conference calls. The Contractor shall provide two (2) senior-level experts to attend the as needed conference calls. For budgeting purposes the Contractor shall assume the conference calls will last no more than two hours in duration and may cover various drinking water topics. The length of the notes will be dependent on the duration and detail of discussions on the call; however, the Contractor should anticipate that the notes for each will be approximately two (2) to four (4) pages in length. A draft of the notes shall be delivered to the WACOR no more than 7 business days after conclusion of the conference call. Upon receipt of any comments from the WACOR, the Contractor shall revise the draft or review EPA's final draft notes. Submittal of notes to the WACOR by email is acceptable.

Deliverables: Draft and review of final conference call notes from no more than 3 conference calls.

#### **Task 2 – Sanitary Surveys at Public Water Systems in DC**

The Contractor shall conduct sanitary surveys at three public water systems in the District of Columbia. These shall be conducted at a time mutually agreeable to EPA, water system representatives, and the Contractor. In support of this task the Contractor shall perform the following tasks:

- (a) Review the drinking water sampling plans, and necessary documents;
- (b) Conduct a pre-sanitary survey conference call 3 weeks prior to the on-site with utility staff and EPA staff to prepare for visit;
- (c) Handle the logistical arrangements between EPA staff, Contractor, and all other participants that will be in attendance during the sanitary survey, including setting a start time, meeting location, security authorizations and any other needs for a successful on-site visit;



(d) Conduct a full sanitary survey which includes the eight elements outlined in the *EPA/State Joint Guidance on Sanitary Surveys* (December 1995), as applicable to the system and follows the April, 1999 EPA guidance manual - Guidance Manual for Conducting Sanitary Surveys of Public Water Systems and Surface Water and Ground Water Under the Direct Influence (GWUDI) (EPA 815-R-99-016)  
(<https://yosemite.epa.gov/water/owrcatalog.nsf/9da204a4b4406cf885256ae0007a79c7/t275720c138ca92e85256b0600723b4a!OpenDocument> and EPA's Learner's Guide, How to Conduct a Sanitary Survey of Drinking Water Systems, September 2015,  
(<http://www.asdwa.org/index.cfm?fuseaction=Page.viewPage&pageId=606>):

- (e) The Contractor shall use the EPA Region III multi-page form format to record these visits, adding photographs and other information as needed to develop a report documenting the visit;
- (f) Conduct exit briefing prior to leaving the public water system;
- (g) Prepare draft reports of the sanitary survey;
- (h) Address any comments provided by EPA and prepare a final report of the sanitary survey; and
- (i) Assist EPA with determining how to update data fields to SDWIS/State. This may include preparing an XML file of updated data elements to be migrated to SDWIS/State.

For budgeting purposes, the Contractor shall anticipate the survey reports to be finalized multi-page forms, along with maps, photographs, organizational charts, and other supplemental information deemed relevant, which should be included in appendices. The draft report will be reviewed simultaneously by the EPA WACOR and one to two other commenters who may provide major comments. The Contractor shall incorporate these reviewer comments and deliver the draft final report within two weeks of receipt of EPA's comments on the draft report. EPA anticipates no more than two draft versions. For a report with only minor revisions or comments from the water supplier, EPA will seek the Contractor's review and response to the comments without revisions to the document. The Contractor shall deliver the report to the EPA WACOR. Email submission is acceptable, as is posting of large documents to a secure File Transfer Protocol (FTP) website.

#### **Subtask 2.1: Sanitary Survey at the Washington Aqueduct**

The Contractor shall conduct a sanitary survey of the Washington Aqueduct (WA) public water system in the District of Columbia before December 2018 at a time mutually agreeable to EPA, WA representatives, and the Contractor. The most recent sanitary survey of this public water system was performed in 2015. This water system consists of source water and treatment facilities (i.e. no distribution system). For planning purposes, the Contractor shall provide no more than two staff persons for three days on-site.

#### **Subtask 2.2 – Sanitary Survey of the Two Naval Public Water Systems**

The Contractor shall conduct a sanitary survey of the Washington Navy Yard and Naval Observatory public water systems in the District of Columbia before May 30, 2019 at a time mutually agreeable to EPA, Navy representatives, and the Contractor. The most recent sanitary survey of these water systems was performed in 2016. These water systems consist of distribution systems with no treatment facilities. For planning purposes, the Contractor shall provide no more than two staff persons for two days on-site.

Deliverables: draft and final sanitary survey reports; data for upload to SDWIS/State

**Task 3 – Finalization of work under 2-04**

The Contractor shall finalize work initiated under work assignment 2-04. Specifically, this includes: (1) developing final course materials and conducting a sampler training course; and finalizing the chlorine calibration video

Deliverables: sampler training course, chlorine calibration video

**Task 4 – DC Direct Implementation Program Review**

The Contractor shall perform a program review of the District of Columbia Direct Implementation (DI) program in the EPA Region III office, no later than February 28, 2019. This type of review was first performed in 2008 and again in 2011 and 2015. The Contractor shall follow a similar format, which is based on the Public Water System Supervision (PWSS) Program data verification/program review format. This review protocol should serve as a template for the review of a selection of compliance data from DC public water systems for compliance determinations. The WACOR will provide the necessary data in hard copy and electronic format, if available.

The WACOR will set up a conference call prior to the on-site review to provide background and identify preliminary data which should be provided to the Contractor prior to the on-site review. The review shall indicate where improvements in data flow, coordination between organizational units, compliance determinations, and tracking may be made. EPA Region III will use the findings of the review to improve procedures for reviewing incoming data from and documenting compliance decisions related to DC public water systems.

The review protocol shall include:

- interview questions to be asked of the EPA Region III DI program staff to ensure that the team understands the DI program's regulatory implementation policies and data management practices;
- a list of questions designed to capture the team's findings and impressions. These questions shall be answered while on-site to the extent possible;
- EPA Region III's use of the Safe Drinking Water Information System, State Version (SDWIS-State) and/or SDWIS Prime tools; and
- data capture forms to be used for the review.

For budgeting purposes, the Contractor should anticipate providing two (2) staff (at least one experienced in performing data verifications/program reviews) for an on-site visit in Philadelphia lasting on more than three (3) days. The report is anticipated to be approximately 40 pages, excluding organizational charts and other supplemental information deemed relevant, which should be included in appendices. The draft report shall be provided to the WACOR for comments and corrections. The report will be reviewed simultaneously by the WACOR and one to two other EPA commenters who will provide comments. The Contractor shall incorporate reviewer comments and deliver the final report in electronic format. Email submission is acceptable, as is posting of large documents to a secure FTP website.

Deliverables: on-site review, draft and final reports

#### **Task 5 – Certified Operator Status Update**

Under Work Assignments 0-04, 1-04, and 2-04 of the current contract, the Contractor collected information on the status of certified operators at public water systems in the District. The Contractor shall update this listing. For planning purposes, the Contractor shall gather this information when sanitary surveys are conducted at public water systems under this work assignment. For any public water system not planned for a visit under this work assignment, the Contractor shall by August 1, 2018 prepare a list of those certified operators whose certifications have expired or will expire between July 1, 2018 and December 31, 2018 for EPA follow-up. The Contractor shall by February 1, 2019 prepare a list of those certified operators whose certifications have expired or will expire between January 1, 2019 and June 30, 2019 for EPA follow-up.

Deliverables: two listings of operator certification expiration dates set to expire

#### **Task 6 - SDWIS Data Management Support**

The Contractor shall assist EPA with implementation of its data management responsibilities by completing the following tasks:

##### **Subtask 6.1 – SDWIS/State Implementation Assistance**

The Contractor shall assist EPA with hosting SDWIS/State on the Contractor's server and optimizing the use based on any issues or gaps noted during a recent DC direct implementation program review and for input of monitoring data and data obtained during sanitary surveys. This could include: importing monitoring schedules; assistance with defining monitoring locations; assistance with electronic data importing via XML sampling and lab to state; and other data management related tasks such as the use of Drinking Water Watch; identifying and assisting with correcting errors or omissions; and making recommendations for improvements in the use and maintenance of SDWIS/State.

##### **Subtask 6.2 - SDWIS Transition to Prime and CMDP Support**

The Contractor shall support the regional transition to the Compliance Data Monitoring Portal (CMDP) and SDWIS Prime. The Contractor shall assist in setting up and running both test and live versions of CMDP and SDWIS Prime and work with the region, DC PWSs, and laboratories to ensure the new systems function properly after the transition. Work shall include, but not be limited to: detecting and correcting corrupt and/or inaccurate records; migrating data from SDWIS to SDWIS Prime; determining and setting SDWIS Prime system configuration; and setting up and initiating stakeholder and end user education and communication. The Contractor shall assist in identifying and linking interfacing applications with SDWIS Prime; and provide user support, such as training and assisting users having issues with CMDP and SDWIS Prime.

For planning purposes, the Contractor shall provide 2-3 webinars, no longer than one hour in length, to train regional staff on the use of new tools or functions. The topics for the webinars will be defined by the WACOR as needs arise.

Deliverables: Data Management technical assistance to be provided through emails, conference calls, webinars or meetings

### **Task 7 – Revised Total Coliform Rule (RTCR) Implementation**

The Contractor shall assist EPA with implementation of this rule by completing the following tasks:

#### **Subtask 7.1 - RTCR Level 2 Assessments**

The Contractor shall be prepared to conduct two Level 2 assessments as needed on very short notice. The staff conducting these assessments shall have demonstrated to the WACOR that they are qualified to conduct these assessments based on previously provided documentation under WA 0-04 and certification from EPA Region III. All assessments shall include EPA staff and staff representing the PWS. All findings of the assessment shall be documented on the EPA Region III Level 2 Assessment Form developed by the Contractor under WA 1-04.

#### **Subtask 7.2 - RTCR Training course**

The Contractor shall prepare and deliver a training course in Philadelphia for EPA Region III staff to enable staff to become knowledgeable about Level 1 and Level 2 assessments. This 6-8 hour course shall cover the following topics: understanding and analyzing water quality data from water sources and distribution systems; disinfection processes including breakpoint chlorination; cause and effect of potential drinking water problems related to sanitary defects; difference between sanitary defects and significant deficiencies and appropriate corrective actions; approaches to flushing; storage tanks and water age issues; depictions of appropriate sampling locations and taps; and explanations of backflow prevention and cross connection control.

For planning purposes, the Contractor shall develop and provide to the WACOR: a draft outline of the course and draft slides; final course materials shall be due within two weeks of receipt comments by the WACOR; course evaluation; and certificates for participants.

Deliverables: Potential Level 2 assessments at DC public water systems; one RTCR Training course with draft and final course training materials

### **Task 8 - Drinking Water Training**

The Contractor shall provide two drinking water training courses in Philadelphia to EPA regional staff on the Phase II/V Rule and the Disinfectant and Disinfection Byproduct Rules. Using existing Contractor developed for EPA training materials, the Contractor shall provide to the WACOR: agenda; slides; student handouts; classroom activities as needed to enhance lectures and to benefit student understanding of the materials; course evaluation; and certificates for attendees. The Contractor shall hold one or two planning conference calls with the WACOR to discuss course logistics, materials, etc.

Deliverables: two training courses with draft and final course training materials

### **Task 9 – Just in Time Technical Assistance**

Through the use of written Technical Direction, the WACOR will provide specific

tasks for the Contractor to provide technical assistance to EPA. It is anticipated that these tasks will relate to those activities that cannot be planned for, but must be addressed as situations arise at the water utilities within the District. Such tasks could include, but are not limited to: conducting a RTCR Level 1 assessment facilitated discussion; sampling (to be defined) and conducting a RTCR Level 2 assessment; reviewing proposed treatment changes; review of treatment or other operational studies or plans; and development of public communication materials.

The Contractor shall be prepared to conduct a facilitated discussion at one water system in response to their trigger of a Level 1 assessment. EPA is interested in using such as an opportunity to provide training and awareness to the utility in how to conduct such an assessment. This activity is expected to follow the real-world event that occurred at the water system that triggered a Level 1 assessment. The Contractor shall be prepared to conduct this discussion as soon as possible after resolution of the event by the water system and to document discussions, identify additional training needed on the part of the water system and provide an evaluation form to participants.

The Contractor shall estimate minimal efforts for this task. EPA will assist with sample bottle procurement if these can be obtained from EPA's laboratory. EPA is not authorizing the Contractor to purchase bottles and supplies at the issuance of the WA. Instead, this will be authorized in the future via written technical direction issued by the WACOR at the time the sampling needs (parameter(s), quantity, locations) are defined.

**Deliverables:** Completed tasks as required via written technical direction with written reports or assessment forms to document the work completed and recommendations; analytical results; details on sampling team preparations

### **Sampling**

Samples to be collected under Task 7 and 9 per technical direction from the WACOR shall be analyzed either at EPA's Environmental Science Center at Ft. Meade (if available) or at another certified drinking water lab. Samples shall not be analyzed by the United States Army Corps of Engineers, Washington Aqueduct. In order to be prepared to complete such sampling, the Contractor shall be prepared to staff two sampling teams consisting of at least two persons with at least one expert sampler and the necessary supplies. The Contractor shall be prepared to be deployed with very short notice from the WACOR.

#### IV. SCHEDULE OF DELIVERABLES:

<b>TASK No.</b>	<b>DELIVERABLE</b>	<b>DATE DUE TO EPA</b>
<b>0</b>	Work Plan and budget	According to contract
	Monthly progress and financial reports	Monthly according to contract
<b>1.</b>	Participation in conference calls	No more than 3 calls; Dates TBD
	Draft TEWG Meeting Notes	7 business days after workgroup conference call
	Final TEWG Meeting Notes or review of EPA's draft final Meeting Notes	Within 7 days of receipt of EPA comments/draft final document
<b>2.</b>	Conduct 3 Sanitary Surveys	To be conducted between October 2018 through May 2019
	Draft Sanitary Survey Reports (3)	Within 1 month of completion of the sanitary survey
	Final Sanitary Survey Reports (3)	Within 2 weeks of receipt of EPA comments/request for revision
	Review of Sanitary Survey Report minor response comments from reviewers	As requested; response due within 2 weeks of EPA request to review
<b>3.</b>	Finalize work under WA 2-04 Training course	To be conducted no later than March 2019
	Video	No later than July 30, 2018
<b>4.</b>	DC DI Program Implementation Review	To be conducted no later than October 30, 2018
<b>5.</b>	Certified Operator status	During the water system sanitary surveys; and for others by August 1, 2018 and February 1, 2019
<b>6.</b>	Data Management Assistance	Ongoing technical assistance to enhance EPA's usage of SDWIS
<b>7.</b>	RTCR Implementation Subtask 7.1 Conduct Level 2 assessments	As needed under Written Technical Direction
	Subtask 7.2 Training course	October – December 2018
<b>8.</b>	Conduct Training Courses Phase II/V Rule and D/DBP Rule	Spring 2019
<b>9.</b>	Just in Time Technical Assistance	Will be handled by written Technical Direction with written reports to follow completion of tasks

#### V. MISCELLANEOUS

#### Software Application Files and Accessibility

Software Application files, if delivered to the Government, shall conform to the requirements relating to accessibility as detailed to the 1998 amendments to the Rehabilitation Act, particularly, but not limited to, § 1194.21 Software applications and operating systems and § 1194.22 Web-based intranet and internet information and applications. See:

<http://www.section508.gov/>

Preferred text format: MS Word, 8.0 or higher (Office 2003 or higher)

Preferred presentation format: Power Point, Office 2003 or higher

Preferred graphics format: Each graphic is an individual GIF file

Preferred portable format: Adobe Acrobat, version 6.0

#### **TRAVEL**

Travel is anticipated for this work assignment following appropriate approval by the work assignment CLCOR. Any travel will be allowable only in accordance with the limitation of FAR 31.205-43 and FAR 31.205-46, and must be approved by the appropriate EPA CLCOR prior to travel taking place.

This work assignment anticipates 3 separate trips to Washington DC, for Task # 2. This work assignment anticipates 4 trips to Philadelphia, for Tasks # 4, 7.2, and 8. Each trip will involve no more than 2 staff persons. Travel will occur within the timeframes noted on the Deliverables table. Tasks #7.1 and 9 will include travel but only if and when written technical direction is provided for work under these tasks.

#### **CONTRACTOR IDENTIFICATION**

Contractor personnel shall always identify themselves as contractor employees by name and organization and physically display that information through an identification badge. Contractor personnel are prohibited from acting as the Agency's official representative. The Contractor shall refer any questions relating to the interpretation of EPA policy, guidance, or regulation to the Contracting Officer (CO), CLCOR and/or WACOR.

#### **PRINTING**

All copying and printing shall be accomplished within the limitations of the printing clause of the contract.

#### **VI. Quality Assurance Surveillance Plan**

All task(s) identified in the performance work statement above are subject to review and approval by the WACOR based on the general guidelines of the contract quality assurance surveillance plan regarding: Programmatic, cost control, schedule, and document development standards.

<b>EPA</b> United States Environmental Protection Agency Washington, DC 20460 <b>Work Assignment</b>						Work Assignment Number 3-04				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000001				
Contract Number EP-C-15-022			Contract Period   09/01/2015   To   06/30/2019 Base                      Option Period Number       3			Title of Work Assignment/SF Site Name Reg 3 Public Water System Impl				
Contractor Cadmus Group LLC, The					Specify Section and paragraph of Contract SOW 1.5, 2.0, 3.2, 3.4, 6.0, 7.0, 8.2, 8.3					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance  From   07/01/2018   To   06/30/2019					
Comments: The purpose of this amendment 1 to Cadmus (EP-C-15-022) WA 3-04 is to revise the title of the work assignment to cover Region 3 and not solely the District of Columbia; add a new Task #10 for a sanitary survey training course; revise the travel needed to complete Task #2.1 from 3 days to 5 days; and clarify										
<input type="checkbox"/> Superfund					Accounting and Appropriations Data					<input checked="" type="checkbox"/> Non-Superfund
Note: To report additional accounting and appropriations date use EPA Form 1900-69A.										
SFO <input type="checkbox"/> (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:		LOE: 1,755						
09/01/2015 To 06/30/2019										
This Action:				188						
Total:				1,943						
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee			LOE:			
Cumulative Approved:				Cost/Fee			LOE:			
Work Assignment Manager Name   Patti-Kay Wisniewski							Branch/Mail Code:			
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="display: flex; justify-content: space-between;"><span>(Signature)</span><span>(Date)</span></div>							Phone Number: 215-814-5668			
							FAX Number: 215-814-2318			
Project Officer Name   Nancy Parrotta							Branch/Mail Code:			
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="display: flex; justify-content: space-between;"><span>(Signature)</span><span>(Date)</span></div>							Phone Number: 202-564-5260			
							FAX Number:			
Other Agency Official Name							Branch/Mail Code:			
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="display: flex; justify-content: space-between;"><span>(Signature)</span><span>(Date)</span></div>							Phone Number:			
							FAX Number:			
Contracting Official Name   Angela Lower							Branch/Mail Code:			
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="display: flex; justify-content: space-between;"><span>(Signature)</span><span>(Date)</span></div>							Phone Number: 513-487-2036			
							FAX Number:			



**PERFORMANCE WORK STATEMENT**  
**Cadmus EP-C-15-022**  
**Work Assignment No. 3-04, Amendment #1**  
**(July 1, 2018 - June 30, 2019)**

**I. ADMINISTRATIVE:** These tasks are authorized by the Contract Level Performance Work Statement sections 1.5, 2.0, 3.2, 3.4, 6.0, 7.0, 8.2, and 8.3.

**A. Title:** ~~District of Columbia~~ **Region 3 Public Water System Direct Implementation Support**

**B. Work Assignment Contracting Officer's Representative (WACOR)**

Patti Kay Wisniewski  
Drinking Water Branch  
U.S. Environmental Protection Agency (EPA)  
1650 Arch Street  
Mail Code 3WP21  
Philadelphia, PA 19103-2029  
Phone: 215-814-5668  
Fax: 215-814-2302  
Email: [wisniewski.patti-kay@epa.gov](mailto:wisniewski.patti-kay@epa.gov)

**Alternate WACOR**

Heather Arvanaghi  
Drinking Water Branch  
U.S. Environmental Protection Agency (EPA)  
1650 Arch Street  
Mail Code 3WP21  
Philadelphia, PA 19103-2029  
Phone: 215-814-5477  
Fax: 215-814-2302  
Email: [arvanaghi.heather@epa.gov](mailto:arvanaghi.heather@epa.gov)

**C. Quality Assurance:**

Task(s) 6, 7 and 9 in this work assignment require quality assurance (QA). Collection, use and analysis of data for these tasks will be identical to the parameters and procedures described in the approved Supplemental Project Specific Quality Assurance Project Plan (SQAPP) completed under task 0 of WA 0-04 and revised under WA 1-04. The project specific QA requirements must be addressed in the monthly progress reports as specified under Task 0, below.

**D. Background:**

**This amendment revises the title of the work assignment to be more encompassing, covering Region 3 and not solely the District of Columbia; adds a new Task (#10) for a**

**sanitary survey training course; revises the travel needed to complete Task #2.1 from 3 days to 5 days; and clarifies other language Tasks #2 and 3, and in Deliverables table.**

EPA Region III is responsible for the direct implementation of the Public Water System Supervision (PWSS) Program in the District of Columbia (DC) and must review compliance data, oversee operational and research studies, provide technical assistance, and ensure the performance of sanitary surveys of the District's public water systems (PWSs).

As the primary agency for the PWSS program in the District of Columbia, EPA Region III receives and reviews compliance data from six (6) regulated PWSs in DC. The Safe Drinking Water Act (SDWA) requires that sanitary surveys of PWSs be conducted periodically in order to ensure that these water systems comply with all regulations promulgated under the SDWA. EPA Region III uses contractor support to perform sanitary surveys of the PWSs in DC and for data management support. As needed, EPA Region III also provides technical assistance and training to regulated water systems, other water users, and regional and state staff across Region 3.

## **II. OBJECTIVE:**

The Contractor shall provide assistance to EPA for program implementation, including: (1) support for workgroup conference calls; (2) development of resources for use in program implementation and evaluation; (3) conducting sanitary surveys of public water systems in DC and preparing reports; (4) providing support for SDWIS/State implementation and transition to SDWIS Prime; (5) providing program training; and (6) providing other technical support necessary for effective implementation of the Safe Drinking Water Act.

## **III. TASK DETAIL:**

The Contractor shall perform the following tasks:

### **Task 0 – Work Plan Submission**

The Contractor shall develop a work plan that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the contractor's key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. If a subcontractor(s) is proposed and subcontractors are outside the local metropolitan area, the Contractor shall include information on plans to manage work and contract costs.

In addition, the Contractor shall prepare a statement indicating that this WA is a continuation of WA 2-04. The work plan shall explain that any collection, use and analysis of data for Tasks 6, 7 and 9 in this work assignment will be identical to the procedures described in the approved SQAPP for the parameters currently described in the SQAPP.

This task also includes monthly progress and financial reports. Monthly financial reports shall be submitted per contract reporting requirements and must include a table with the invoice LOE and cost broken out by the tasks in this WA. The monthly progress report shall indicate, in a separate QA section, whether significant QA issues have been identified and how they are being resolved.

The Contractor shall immediately notify the Contract Level Contracting Officer Representative (CLCOR) and Work Assignment Contracting Officer Representative (WACOR) if any changes to the tasks involving the collection and analysis of the data occurs, and prepare a new SQAPP supplementing the Contract QAPP accordingly. Work on these tasks cannot proceed until the Contractor receives notification of the revised/amended SQAPP approval from the CLCOR via e-mail.

The tasks under this work assignment do not require the acquisition of “off-site” facilities for conferences and meetings as defined in the IPN 12-05 and the events associated with this work assignment are not covered by EPA Order 1900.3 and do not require EPA Form 5170.

The Contractor shall immediately alert the WACOR to any anticipated event under the work assignment which may result in incurring an estimated \$20,000 or more cost, funded by EPA, specific to that event, meeting, training, etc. Those costs would include travel of both prime and consultant personnel, planning and facilitation costs, AV and rental of venue costs, etc. The EPA WACOR will then prepare approval internal paperwork for the event and will advise the Contractor when appropriate signatures have been obtained. At that point, effort can proceed for the event. If the event is being sponsored by another EPA organization, the organization providing the planning is responsible for the approval.

Deliverables: Work plan and monthly progress and financial reports. Checklist for Quality Assurance Project Plans, Summary of Quality Assurance Activities and Issues by Work Assignment.

#### **Task 1 – Technical Expert Working Group (TEWG) Support**

The Contractor shall participate in, and prepare notes for three (3) TEWG conference calls. The Contractor shall provide two (2) senior-level experts to attend the as needed conference calls. For budgeting purposes the Contractor shall assume the conference calls will last no more than two hours in duration and may cover various drinking water topics. The length of the notes will be dependent on the duration and detail of discussions on the call; however, the Contractor should anticipate that the notes for each will be approximately two (2) to four (4) pages in length. A draft of the notes shall be delivered to the WACOR no more than 7 business days after conclusion of the conference call. Upon receipt of any comments from the WACOR, the Contractor shall revise the draft or review EPA’s final draft notes. Submittal of notes to the WACOR by email is acceptable.

Deliverables: Draft and review of final conference call notes from no more than 3 conference calls.

#### **Task 2 – Sanitary Surveys at Public Water Systems in DC**

The Contractor shall conduct sanitary surveys at three public water systems in the District of Columbia. These shall be conducted at a time mutually agreeable to EPA, water system representatives, and the Contractor. In support of this task the Contractor shall perform the following tasks:

- (a) Review the drinking water sampling plans, and necessary documents;

- (b) Conduct a pre-sanitary survey conference call 3 weeks prior to the on-site with utility staff and EPA staff to prepare for visit;
- (c) Handle the logistical arrangements between EPA staff, Contractor, and all other participants that will be in attendance during the sanitary survey, including setting a start time, meeting location, security authorizations and any other needs for a successful on-site visit;
- (d) Conduct a full sanitary survey which includes the eight elements outlined in the *EPA/State Joint Guidance on Sanitary Surveys* (December 1995), as applicable to the system and follows the April, 1999 EPA guidance manual - Guidance Manual for Conducting Sanitary Surveys of Public Water Systems and Surface Water and Ground Water Under the Direct Influence (GWUDI) (EPA 815-R-99-016)  
<https://yosemite.epa.gov/water/owrcatalog.nsf/9da204a4b4406ef885256ae0007a79c7/f275720c138ca92e85256b0600723b4a!OpenDocument> and EPA's Learner's Guide, How to Conduct a Sanitary Survey of Drinking Water Systems, September 2015,  
<http://www.asdwa.org/index.cfm?fuseaction=Page.viewPage&pageId=606>);
- (e) The Contractor shall use the EPA Region III multi-page form format to record these visits, adding photographs and other information as needed to develop a report documenting the visit;
- (f) Conduct exit briefing prior to leaving the public water system;
- (g) Prepare draft reports of the sanitary survey;
- (h) Address any comments provided by EPA and prepare a final report of the sanitary survey; and
- (i) Assist EPA with determining how to update data fields to SDWIS/State. This may include preparing an XML file of updated data elements to be migrated to SDWIS/State.

~~For budgeting purposes, the Contractor shall anticipate the survey reports to be finalized multi-page forms, along with maps, photographs, organizational charts, and other supplemental information deemed relevant, which should be included in appendices. A draft report shall be provided to EPA WACOR within two weeks of completion of the onsite visit. The draft report will be reviewed simultaneously by the EPA WACOR and one to two other commenters who may provide major comments. The Contractor shall incorporate these reviewer comments and deliver the draft final report within one week (for the smaller water systems) and within two weeks (for the larger water systems) of receipt of EPA's comments on the draft report. EPA anticipates no more than two draft versions. For a report with only minor revisions or comments from the water supplier, EPA will seek the Contractor's review and response to the comments without revisions to the document. The Contractor shall deliver the report to the EPA WACOR. Email submission is acceptable, as is posting of large documents to a secure File Transfer Protocol (FTP) website.~~

### **Subtask 2.1: Sanitary Survey at the Washington Aqueduct**

The Contractor shall conduct a sanitary survey of the Washington Aqueduct (WA) public water system in the District of Columbia before December 2018 at a time mutually agreeable to EPA, WA representatives, and the Contractor. The most recent sanitary survey of this public water system was performed in 2015. This water system consists of source water and treatment facilities (i.e. no distribution system). For planning purposes, the Contractor shall provide no more than two staff persons for ~~three~~ five days on-site.

For budgeting purposes, the Contractor shall anticipate the survey reports to be finalized multi-page forms, along with maps, photographs, organizational charts, and other supplemental information deemed relevant, which should be included in appendices. A draft report shall be provided to EPA WACOR within three weeks of completion of the onsite visit. The draft report will be reviewed simultaneously by the EPA WACOR and one to two other commenters who may provide major comments. The Contractor shall incorporate these reviewer comments and deliver the draft final report within two weeks of receipt of EPA's comments on the draft report. EPA anticipates no more than two draft versions. For a report with only minor revisions or comments from the water supplier, EPA will seek the Contractor's review and response to the comments without revisions to the document. The Contractor shall deliver the report to the EPA WACOR. Email submission is acceptable, as is posting of large documents to a secure File Transfer Protocol (FTP) website.

### **Subtask 2.2 – Sanitary Survey of the Two Naval Public Water Systems**

The Contractor shall conduct a sanitary survey of the Washington Navy Yard and Naval Observatory public water systems in the District of Columbia before May 30, 2019 at a time mutually agreeable to EPA, Navy representatives, and the Contractor. The most recent sanitary survey of these water systems was performed in 2016. These water systems consist of distribution systems with no treatment facilities. For planning purposes, the Contractor shall provide no more than two staff persons for two days on-site.

For budgeting purposes, the Contractor shall anticipate the survey reports to be finalized multi-page forms, along with maps, photographs, organizational charts, and other supplemental information deemed relevant, which should be included in appendices. A draft report shall be provided to EPA WACOR within two weeks of completion of the onsite visit. The draft report will be reviewed simultaneously by the EPA WACOR and one to two other commenters who may provide major comments. The Contractor shall incorporate these reviewer comments and deliver the draft final report within one week of receipt of EPA's comments on the draft report. EPA anticipates no more than two draft versions. For a report with only minor revisions or comments from the water supplier, EPA will seek the Contractor's review and response to the comments without revisions to the document. The Contractor shall deliver the report to the EPA WACOR. Email submission is acceptable, as is posting of large documents to a secure File Transfer Protocol (FTP) website.

Deliverables: draft and final sanitary survey reports; data for upload to SDWIS/State

### **Task 3 – Finalization of work under 2-04**

The Contractor shall finalize work initiated under work assignment 2-04. Specifically, this includes: (1) developing final course materials and conducting a training course in the District of Columbia for water suppliers; (2) finalizing the chlorine calibration video; and (3) minor revisions to 2 draft sanitary survey reports as EPA works to finalize.

EPA finds it necessary to modify the focus of this one-day training course to include: compliance monitoring requirements for disinfection by-products, lead and copper, and unregulated

contaminants; and compliance sampling locations, bottles and procedures. The Contractor shall revise course materials appropriately. EPA no longer desires this course to be video-taped. For planning purposes, the Contractor shall anticipate 15 students will attend this one-day course and training materials will include slides and other reference materials, not to exceed 150 pages per student binder.

Deliverables: one-day training course with student materials and chlorine calibration video

#### **Task 4 – DC Direct Implementation Program Review**

The Contractor shall perform a program review of the District of Columbia Direct Implementation (DI) program in the EPA Region III office, no later than February 28, 2019. This type of review was first performed in 2008 and again in 2011 and 2015. The Contractor shall follow a similar format, which is based on the Public Water System Supervision (PWSS) Program data verification/program review format. This review protocol should serve as a template for the review of a selection of compliance data from DC public water systems for compliance determinations. The WACOR will provide the necessary data in hard copy and electronic format, if available.

The WACOR will set up a conference call prior to the on-site review to provide background and identify preliminary data which should be provided to the Contractor prior to the on-site review. The review shall indicate where improvements in data flow, coordination between organizational units, compliance determinations, and tracking may be made. EPA Region III will use the findings of the review to improve procedures for reviewing incoming data from and documenting compliance decisions related to DC public water systems.

The review protocol shall include:

- interview questions to be asked of the EPA Region III DI program staff to ensure that the team understands the DI program's regulatory implementation policies and data management practices;
- a list of questions designed to capture the team's findings and impressions. These questions shall be answered while on-site to the extent possible;
- EPA Region III's use of the Safe Drinking Water Information System, State Version (SDWIS-State) and/or SDWIS Prime tools; and
- data capture forms to be used for the review.

For budgeting purposes, the Contractor should anticipate providing two (2) staff (at least one experienced in performing data verifications/program reviews) for an on-site visit in Philadelphia lasting on more than three (3) days. The report is anticipated to be approximately 40 pages, excluding organizational charts and other supplemental information deemed relevant, which should be included in appendices. The draft report will be provided to the WACOR for comments and corrections. The report will be reviewed simultaneously by the WACOR and one to two other EPA commenters who will provide comments. The Contractor shall incorporate reviewer comments and deliver the final report in electronic format. Email submission is acceptable, as is posting of large documents to a secure FTP website.

Deliverables: on-site review, draft and final reports



### **Task 5 – Certified Operator Status Update**

Under Work Assignments 0-04, 1-04, and 2-04 of the current contract, the Contractor collected information on the status of certified operators at public water systems in the District. The Contractor shall update this listing. For planning purposes, the Contractor shall gather this information when sanitary surveys are conducted at public water systems under this work assignment. For any public water system not planned for a visit under this work assignment, the Contractor shall by August 1, 2018 prepare a list of those certified operators whose certifications have expired or will expire between July 1, 2018 and December 31, 2018 for EPA follow-up. The Contractor shall by February 1, 2019 prepare a list of those certified operators whose certifications have expired or will expire between January 1, 2019 and June 30, 2019 for EPA follow-up.

Deliverables: two listings of operator certification expiration dates set to expire

### **Task 6 - SDWIS Data Management Support**

The Contractor shall assist EPA with implementation of its data management responsibilities by completing the following tasks:

#### **Subtask 6.1 – SDWIS/State Implementation Assistance**

The Contractor shall assist EPA with hosting SDWIS/State on the Contractor's server and optimizing the use based on any issues or gaps noted during a recent DC direct implementation program review and for input of monitoring data and data obtained during sanitary surveys. This could include: importing monitoring schedules; assistance with defining monitoring locations; assistance with electronic data importing via XML sampling and lab to state; and other data management related tasks such as the use of Drinking Water Watch; identifying and assisting with correcting errors or omissions; and making recommendations for improvements in the use and maintenance of SDWIS/State.

#### **Subtask 6.2 - SDWIS Transition to Prime and CMDP Support**

The Contractor shall support the regional transition to the Compliance Data Monitoring Portal (CMDP) and SDWIS Prime. The Contractor shall assist in setting up and running both test and live versions of CMDP and SDWIS Prime and work with the region, DC PWSs, and laboratories to ensure the new systems function properly after the transition. Work shall include, but not be limited to: detecting and correcting corrupt and/or inaccurate records; migrating data from SDWIS to SDWIS Prime; determining and setting SDWIS Prime system configuration; and setting up and initiating stakeholder and end user education and communication. The Contractor shall assist in identifying and linking interfacing applications with SDWIS Prime; and provide user support, such as training and assisting users having issues with CMDP and SDWIS Prime.

For planning purposes, the Contractor shall provide 2-3 webinars, no longer than one hour in length, to train regional staff on the use of new tools or functions. The topics for the webinars will be defined by the WACOR as needs arise.

Deliverables: Data Management technical assistance to be provided through emails, conference calls, webinars or meetings

### **Task 7 – Revised Total Coliform Rule (RTCR) Implementation**

The Contractor shall assist EPA with implementation of this rule by completing the following tasks:

#### **Subtask 7.1 - RTCR Level 2 Assessments**

The Contractor shall be prepared to conduct two Level 2 assessments as needed on very short notice. The staff conducting these assessments shall have demonstrated to the WACOR that they are qualified to conduct these assessments based on previously provided documentation under WA 0-04 and certification from EPA Region III. All assessments shall include EPA staff and staff representing the PWS. All findings of the assessment shall be documented on the EPA Region III Level 2 Assessment Form developed by the Contractor under WA 1-04.

#### **Subtask 7.2 - RTCR Training course**

The Contractor shall prepare and deliver a training course in Philadelphia for EPA Region III staff to enable staff to become knowledgeable about Level 1 and Level 2 assessments. This 6-8 hour course shall cover the following topics: understanding and analyzing water quality data from water sources and distribution systems; disinfection processes including breakpoint chlorination; cause and effect of potential drinking water problems related to sanitary defects; difference between sanitary defects and significant deficiencies and appropriate corrective actions; approaches to flushing; storage tanks and water age issues; depictions of appropriate sampling locations and taps; and explanations of backflow prevention and cross connection control.

For planning purposes, the Contractor shall develop and provide to the WACOR: a draft outline of the course and draft slides; final course materials shall be due within two weeks of receipt comments by the WACOR; course evaluation; and certificates for participants.

Deliverables: Potential Level 2 assessments at DC public water systems; one RTCR Training course with draft and final course training materials

### **Task 8 - Drinking Water Training**

The Contractor shall provide two drinking water training courses in Philadelphia to EPA regional staff on the Phase II/V Rule and the Disinfectant and Disinfection Byproduct Rules. Using existing Contractor developed for EPA training materials, the Contractor shall provide to the WACOR: agenda; slides; student handouts; classroom activities as needed to enhance lectures and to benefit student understanding of the materials; course evaluation; and certificates for attendees. The Contractor shall hold one or two planning conference calls with the WACOR to discuss course logistics, materials, etc.

Deliverables: two training courses with draft and final course training materials

### **Task 9 – Just in Time Technical Assistance**

Through the use of written Technical Direction, the WACOR will provide specific



tasks for the Contractor to provide technical assistance to EPA. It is anticipated that these tasks will relate to those activities that cannot be planned for, but must be addressed as situations arise at the water utilities within the District. Such tasks could include, but are not limited to: conducting a RTCR Level 1 assessment facilitated discussion; sampling (to be defined) and conducting a RTCR Level 2 assessment; reviewing proposed treatment changes; review of treatment or other operational studies or plans; and development of public communication materials.

The Contractor shall be prepared to conduct a facilitated discussion at one water system in response to their trigger of a Level 1 assessment. EPA is interested in using such as an opportunity to provide training and awareness to the utility in how to conduct such an assessment. This activity is expected to follow the real-world event that occurred at the water system that triggered a Level 1 assessment. The Contractor shall be prepared to conduct this discussion as soon as possible after resolution of the event by the water system and to document discussions, identify additional training needed on the part of the water system and provide an evaluation form to participants.

The Contractor shall estimate minimal efforts for this task. EPA will assist with sample bottle procurement if these can be obtained from EPA's laboratory. EPA is not authorizing the Contractor to purchase bottles and supplies. This will be authorized via written technical direction at the time the sampling needs (parameter(s), quantity, locations) are defined.

**Deliverables:** Completed tasks as required via written technical direction with written reports or assessment forms to document the work completed and recommendations; analytical results; details on sampling team preparations

### **Sampling**

Samples to be collected in the District of Columbia under Task 7 and 9 at the written request of the WACOR shall be analyzed either at EPA's Environmental Science Center at Ft. Meade (if available) or at another certified drinking water lab. Samples shall not be analyzed by the United States Army Corps of Engineers, Washington Aqueduct. In order to be prepared to complete such sampling, the Contractor shall be prepared to staff two sampling teams consisting of at least two persons with at least one expert sampler and the necessary supplies. The Contractor shall be prepared to be deployed with very short notice from the WACOR.

### **Task 10 – Sanitary Survey Training Course**

The Contractor shall provide an agenda, training slides, and other materials and conduct a sanitary survey training course for state staff. The Contractor shall use course materials developed under this contract, Work Assignment #1-04 with only minimal updating. This course shall be held in Pennsylvania and include field visits to a ground water and a surface water public water system. The Contractor shall plan for a 5-day course with a class size of 20 -25 students. The Contractor shall provide all resource documents electronically to all students for their future use. The Contractor shall provide a course evaluation form to gather student feedback on the training and provide a summary of this feedback to the EPA WACOR. The Pennsylvania Department of Environmental Protection and the EPA WACOR will assist with locating water systems for onsite visits.

Deliverables: One multi-day sanitary survey course, resource materials, course evaluation summary.

#### IV. SCHEDULE OF DELIVERABLES:

<b>TASK No.</b>	<b>DELIVERABLE</b>	<b>DATE DUE TO EPA</b>
<b>0</b>	Work Plan and budget	According to contract
	Monthly progress and financial reports	Monthly according to contract
<b>1.</b>	Participation in conference calls	No more than 3 calls; Dates TBD
	Draft TEWG Meeting Notes	7 business days after workgroup conference call
	Final TEWG Meeting Notes or review of EPA's draft final Meeting Notes	Within 7 days of receipt of EPA comments/draft final document
<b>2.</b>	Conduct 3 Sanitary Surveys in DC	To be conducted between October 2018 through May 2019
	Draft Sanitary Survey Report for Washington Aqueduct	Within <del>1-month</del> three weeks of completion of the sanitary survey
	Final Sanitary Survey Report for Washington Aqueduct	Within 2 weeks of receipt of EPA comments/request for revision
	Draft Sanitary Survey Reports for Naval Facilities	Within two weeks of completion of the sanitary survey
	Final Sanitary Survey Report for Naval Facilities	Within 1 week of receipt of EPA comments/request for revision
	Review of Sanitary Survey Report minor response comments from reviewers	As requested; response due within 2 weeks of EPA request to review
<b>3.</b>	Finalize work under WA 2-04 Training course for water suppliers in DC	To be conducted no later than March 2019
	Chlorine Calibration Video	No later than July 30, 2018
<b>4.</b>	DC DI Program Implementation Review	To be conducted no later than October 30, 2018
<b>5.</b>	Certified Operator status	During the water system sanitary surveys; and for others by August 1, 2018 and February 1, 2019
<b>6.</b>	Data Management Assistance	Ongoing technical assistance to enhance EPA's usage of SDWIS
<b>7.</b>	RTCR Implementation Subtask 7.1 Conduct Level 2 assessments	As needed under Written Technical Direction
	Subtask 7.2 Training course in Philadelphia	October – December 2018
<b>8.</b>	Conduct Training Courses in Philadelphia Phase II/V Rule and D/DBP Rule	Spring 2019

<b>TASK No.</b>	<b>DELIVERABLE</b>	<b>DATE DUE TO EPA</b>
<b>9.</b>	Just in Time Technical Assistance	Will be handled by written Technical Direction with written reports to follow completion of tasks
<b>10.</b>	Sanitary Survey Training Course in Pennsylvania	Spring 2019

## **V. MISCELLANEOUS**

### **Software Application Files and Accessibility**

Software Application files, if delivered to the Government, shall conform to the requirements relating to accessibility as detailed to the 1998 amendments to the Rehabilitation Act, particularly, but not limited to, § 1194.21 Software applications and operating systems and § 1194.22 Web-based intranet and internet information and applications. See:

<http://www.section508.gov/>

Preferred text format: MS Word, 8.0 or higher (Office 2003 or higher)

Preferred presentation format: Power Point, Office 2003 or higher

Preferred graphics format: Each graphic is an individual GIF file

Preferred portable format: Adobe Acrobat, version 6.0

## **TRAVEL**

Travel is anticipated for this work assignment following appropriate approval by the work assignment CLCOR. Any travel will be allowable only in accordance with the limitation of FAR 31.205-43 and FAR 31.205-46, and must be approved by the appropriate EPA CLCOR prior to travel taking place.

This work assignment anticipates 3 separate trips to Washington DC, for Tasks # 2 and 3. This work assignment anticipates 4 trips to Philadelphia, for Tasks # 4, 7.2, and 8. Under Task 10, this work assignment anticipates 1 multi-day trip to Pennsylvania. Each trip will involve no more than 2 staff persons. Travel will occur within the timeframes noted on the Deliverables table. Tasks #7.1 and 9 will include travel but only if and when written technical direction is provided for work under these tasks.

## **CONTRACTOR IDENTIFICATION**

Contractor personnel shall always identify themselves as contractor employees by name and organization and physically display that information through an identification badge. Contractor personnel are prohibited from acting as the Agency's official representative. The Contractor shall refer any questions relating to the interpretation of EPA policy, guidance, or regulation to the Contracting Officer (CO), CLCOR and/or WACOR.

## **PRINTING**

All copying and printing shall be accomplished within the limitations of the printing clause of the contract.

## **VI. Quality Assurance Surveillance Plan**

All task(s) identified in the performance work statement above are subject to review and approval by the WACOR based on the general guidelines of the contract quality assurance surveillance plan regarding: Programmatic, cost control, schedule, and document development standards.

<b>EPA</b> United States Environmental Protection Agency Washington, DC 20460 <b>Work Assignment</b>						Work Assignment Number 3-04				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000002				
Contract Number EP-C-15-022			Contract Period 09/01/2015 To 06/30/2019			Title of Work Assignment/SF Site Name				
			Base                      Option Period Number                      3			Reg 3 PWS Direct Implem Suppor				
Contractor Cadmus Group LLC, The					Specify Section and paragraph of Contract SOW 1.5, 2.0, 3.2, 3.4, 6.0, 7.0, 8.2, 8.3					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance  From 07/01/2018 To 06/30/2019					
Comments: The purpose of this amendment 2 to Cadmus (EP-C-15-022) WA 3-04 is to add two new tasks. Task 11 for SDWIS/State Training for Maryland's drinking water staff and Task 12 for assistance with enhancing the input of data to STORET.										
<input type="checkbox"/> Superfund					Accounting and Appropriations Data					<input checked="" type="checkbox"/> Non-Superfund
Note: To report additional accounting and appropriations date use EPA Form 1900-69A.										
SFO <input type="checkbox"/> (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 1,943				
09/01/2015 To 06/30/2019										
This Action:						330				
Total:						2,273				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee		LOE:				
Cumulative Approved:				Cost/Fee		LOE:				
Work Assignment Manager Name Patti-Kay Wisniewski						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number: 215-814-5668				
						FAX Number: 215-814-2318				
Project Officer Name Nancy Parrotta						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number: 202-564-5260				
						FAX Number:				
Other Agency Official Name Lisa Mitchell-Flinn						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number: 513-487-2852				
						FAX Number:				
Contracting Official Name Angela Lower						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number: 513-487-2036				
						FAX Number:				

**PERFORMANCE WORK STATEMENT**  
**Cadmus EP-C-15-022**  
**Work Assignment No. 3-04, Amendment #2**  
**(July 1, 2018 - June 30, 2019)**

**I. ADMINISTRATIVE:** These tasks are authorized by the Contract Level Performance Work Statement sections 1.5, 2.0, 3.2, 3.4, 6.0, 7.0, 8.2, and 8.3.

**A. Title: Region 3 Public Water System Direct Implementation Support**

**B. Work Assignment Contracting Officer's Representative (WACOR)**

Patti Kay Wisniewski  
Drinking Water Branch  
U.S. Environmental Protection Agency (EPA)  
1650 Arch Street  
Mail Code 3WP21  
Philadelphia, PA 19103-2029  
Phone: 215-814-5668  
Fax: 215-814-2302  
Email: [wisniewski.patti-kay@epa.gov](mailto:wisniewski.patti-kay@epa.gov)

**Alternate WACOR**

Heather Arvanaghi  
Drinking Water Branch  
U.S. Environmental Protection Agency (EPA)  
1650 Arch Street  
Mail Code 3WP21  
Philadelphia, PA 19103-2029  
Phone: 215-814-5477  
Fax: 215-814-2302  
Email: [arvanaghi.heather@epa.gov](mailto:arvanaghi.heather@epa.gov)

**C. Quality Assurance:**

Task(s) 6, 7 and 9 in this work assignment require quality assurance (QA). Collection, use and analysis of data for these tasks will be identical to the parameters and procedures described in the approved Supplemental Project Specific Quality Assurance Project Plan (SQAPP) completed under task 0 of WA 0-04 and revised under WA 1-04. The project specific QA requirements must be addressed in the monthly progress reports as specified under Task 0, below.

**D. Background:**

**Amendment#2 adds two new tasks: Task # 11 for SDWIS/State training for Maryland's drinking water staff and Task # 12 for assistance with enhancing the input of data to STORET.**

Amendment #1 previously revised the title of the work assignment to be more encompassing, covering Region 3 and not solely the District of Columbia; added a new Task (#10) for a sanitary survey training course; revised the travel needed to complete Task #2.1 from 3 days to 5 days; and clarified other language Tasks #2 and 3, and in Deliverables table.

EPA Region III is responsible for the direct implementation of the Public Water System Supervision (PWSS) Program in the District of Columbia (DC) and must review compliance data, oversee operational and research studies, provide technical assistance, and ensure the performance of sanitary surveys of the District's public water systems (PWSs).

As the primacy agency for the PWSS program in the District of Columbia, EPA Region III receives and reviews compliance data from six (6) regulated PWSs in DC. The Safe Drinking Water Act (SDWA) requires that sanitary surveys of PWSs be conducted periodically in order to ensure that these water systems comply with all regulations promulgated under the SDWA. EPA Region III uses contractor support to perform sanitary surveys of the PWSs in DC and for data management support.

As needed, EPA Region III also provides technical assistance and training to regulated water systems, other water users, and regional and state staff across Region 3.

## **II. OBJECTIVE:**

The Contractor shall provide assistance to EPA for program implementation, including: (1) support for workgroup conference calls; (2) development of resources for use in program implementation and evaluation; (3) conducting sanitary surveys of public water systems in DC and preparing reports; (4) providing support for SDWIS/State implementation and transition to SDWIS Prime; (5) providing program training; and (6) providing other technical support necessary for effective implementation of the Safe Drinking Water Act.

## **III. TASK DETAIL:**

The Contractor shall perform the following tasks:

### **Task 0 – Work Plan Submission**

The Contractor shall develop a work plan that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the contractor's key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. If a subcontractor(s) is proposed and subcontractors are outside the local metropolitan area, the Contractor shall include information on plans to manage work and contract costs.

In addition, the Contractor shall prepare a statement indicating that this WA is a continuation of WA 2-04. The work plan shall explain that any collection, use and analysis of data for Tasks 6, 7 and 9 in this work assignment will be identical to the procedures described in the approved SQAPP for the parameters currently described in the SQAPP.



This task also includes monthly progress and financial reports. Monthly financial reports shall be submitted per contract reporting requirements and must include a table with the invoice LOE and cost broken out by the tasks in this WA. The monthly progress report shall indicate, in a separate QA section, whether significant QA issues have been identified and how they are being resolved. The Contractor shall immediately notify the Contract Level Contracting Officer Representative (CLCOR) and Work Assignment Contracting Officer Representative (WACOR) if any changes to the tasks involving the collection and analysis of the data occurs, and prepare a new SQAPP supplementing the Contract QAPP accordingly. Work on these tasks cannot proceed until the Contractor receives notification of the revised/amended SQAPP approval from the CLCOR via e-mail.

The tasks under this work assignment do not require the acquisition of “off-site” facilities for conferences and meetings as defined in the IPN 12-05 and the events associated with this work assignment are not covered by EPA Order 1900.3 and do not require EPA Form 5170.

The Contractor shall immediately alert the WACOR to any anticipated event under the work assignment which may result in incurring an estimated \$20,000 or more cost, funded by EPA, specific to that event, meeting, training, etc. Those costs would include travel of both prime and consultant personnel, planning and facilitation costs, AV and rental of venue costs, etc. The EPA WACOR will then prepare approval internal paperwork for the event and will advise the Contractor when appropriate signatures have been obtained. At that point, effort can proceed for the event. If the event is being sponsored by another EPA organization, the organization providing the planning is responsible for the approval.

Deliverables: Work plan and monthly progress and financial reports. Checklist for Quality Assurance Project Plans, Summary of Quality Assurance Activities and Issues by Work Assignment.

#### **Task 1 – Technical Expert Working Group (TEWG) Support**

The Contractor shall participate in, and prepare notes for three (3) TEWG conference calls. The Contractor shall provide two (2) senior-level experts to attend the as needed conference calls. For budgeting purposes the Contractor shall assume the conference calls will last no more than two hours in duration and may cover various drinking water topics. The length of the notes will be dependent on the duration and detail of discussions on the call; however, the Contractor should anticipate that the notes for each will be approximately two (2) to four (4) pages in length. A draft of the notes shall be delivered to the WACOR no more than 7 business days after conclusion of the conference call. Upon receipt of any comments from the WACOR, the Contractor shall revise the draft or review EPA’s final draft notes. Submittal of notes to the WACOR by email is acceptable.

Deliverables: Draft and review of final conference call notes from no more than 3 conference calls.

#### **Task 2 – Sanitary Surveys at Public Water Systems in DC**

The Contractor shall conduct sanitary surveys at three public water systems in the District of

Columbia. These shall be conducted at a time mutually agreeable to EPA, water system representatives, and the Contractor. In support of this task the Contractor shall perform the following tasks:

- (a) Review the drinking water sampling plans, and necessary documents;
- (b) Conduct a pre-sanitary survey conference call 3 weeks prior to the on-site with utility staff and EPA staff to prepare for visit;
- (c) Handle the logistical arrangements between EPA staff, Contractor, and all other participants that will be in attendance during the sanitary survey, including setting a start time, meeting location, security authorizations and any other needs for a successful on-site visit;
- (d) Conduct a full sanitary survey which includes the eight elements outlined in the *EPA/State Joint Guidance on Sanitary Surveys* (December 1995), as applicable to the system and follows the April, 1999 EPA guidance manual - Guidance Manual for Conducting Sanitary Surveys of Public Water Systems and Surface Water and Ground Water Under the Direct Influence (GWUDI) (EPA 815-R-99-016)  
(<https://yosemite.epa.gov/water/owrcatalog.nsf/9da204a4b4406ef885256ae0007a79c7/f275720c138ca92e85256b0600723b4a!OpenDocument> and EPA's Learner's Guide, How to Conduct a Sanitary Survey of Drinking Water Systems, September 2015, (<http://www.asdwa.org/index.cfm?fuseaction=Page.viewPage&pageId=606>);
- (e) The Contractor shall use the EPA Region III multi-page form format to record these visits, adding photographs and other information as needed to develop a report documenting the visit;
- (f) Conduct exit briefing prior to leaving the public water system;
- (g) Prepare draft reports of the sanitary survey;
- (h) Address any comments provided by EPA and prepare a final report of the sanitary survey; and
- (i) Assist EPA with determining how to update data fields to SDWIS/State. This may include preparing an XML file of updated data elements to be migrated to SDWIS/State.

### **Subtask 2.1: Sanitary Survey at the Washington Aqueduct**

The Contractor shall conduct a sanitary survey of the Washington Aqueduct (WA) public water system in the District of Columbia before December 2018 at a time mutually agreeable to EPA, WA representatives, and the Contractor. The most recent sanitary survey of this public water system was performed in 2015. This water system consists of source water and treatment facilities (i.e. no distribution system). For planning purposes, the Contractor shall provide no more than two staff persons for five days on-site.

For budgeting purposes, the Contractor shall anticipate the survey reports to be finalized multi-page forms, along with maps, photographs, organizational charts, and other supplemental information deemed relevant, which should be included in appendices. A draft report shall be provided to EPA WACOR within three weeks of completion of the onsite visit. The draft report will be reviewed simultaneously by the EPA WACOR and one to two other commenters who may provide major comments. The Contractor shall incorporate these reviewer comments and deliver the draft final report within two weeks of receipt of EPA's comments on the draft report. EPA anticipates no more than two draft versions. For a report with only minor revisions or comments from the water supplier, EPA will seek the Contractor's review and response to the

comments without revisions to the document. The Contractor shall deliver the report to the EPA WACOR. Email submission is acceptable, as is posting of large documents to a secure File Transfer Protocol (FTP) website.

### **Subtask 2.2 – Sanitary Survey of the Two Naval Public Water Systems**

The Contractor shall conduct a sanitary survey of the Washington Navy Yard and Naval Observatory public water systems in the District of Columbia before May 30, 2019 at a time mutually agreeable to EPA, Navy representatives, and the Contractor. The most recent sanitary survey of these water systems was performed in 2016. These water systems consist of distribution systems with no treatment facilities. For planning purposes, the Contractor shall provide no more than two staff persons for two days on-site.

For budgeting purposes, the Contractor shall anticipate the survey reports to be finalized multi-page forms, along with maps, photographs, organizational charts, and other supplemental information deemed relevant, which should be included in appendices. A draft report shall be provided to EPA WACOR within two weeks of completion of the onsite visit. The draft report will be reviewed simultaneously by the EPA WACOR and one to two other commenters who may provide major comments. The Contractor shall incorporate these reviewer comments and deliver the draft final report within one week of receipt of EPA's comments on the draft report. EPA anticipates no more than two draft versions. For a report with only minor revisions or comments from the water supplier, EPA will seek the Contractor's review and response to the comments without revisions to the document. The Contractor shall deliver the report to the EPA WACOR. Email submission is acceptable, as is posting of large documents to a secure File Transfer Protocol (FTP) website.

Deliverables: draft and final sanitary survey reports; data for upload to SDWIS/State

### **Task 3 – Finalization of work under 2-04**

The Contractor shall finalize work initiated under work assignment 2-04. Specifically, this includes: (1) developing final course materials and conducting a training course in the District of Columbia for water suppliers; (2) finalizing the chlorine calibration video; and (3) minor revisions to 2 draft sanitary survey reports as EPA works to finalize.

EPA finds it necessary to modify the focus of this one-day training course to include: compliance monitoring requirements for disinfection by-products, lead and copper, and unregulated contaminants; and compliance sampling locations, bottles and procedures. The Contractor shall revise course materials appropriately. EPA no longer desires this course to be video-taped. For planning purposes, the Contractor shall anticipate 15 students will attend this one-day course and training materials will include slides and other reference materials, not to exceed 150 pages per student binder.

Deliverables: one-day training course with student materials and chlorine calibration video

#### **Task 4 – DC Direct Implementation Program Review**

The Contractor shall perform a program review of the District of Columbia Direct Implementation (DI) program in the EPA Region III office, no later than February 28, 2019. This type of review was first performed in 2008 and again in 2011 and 2015. The Contractor shall follow a similar format, which is based on the Public Water System Supervision (PWSS) Program data verification/program review format. This review protocol should serve as a template for the review of a selection of compliance data from DC public water systems for compliance determinations. The WACOR will provide the necessary data in hard copy and electronic format, if available.

The WACOR will set up a conference call prior to the on-site review to provide background and identify preliminary data which should be provided to the Contractor prior to the on-site review. The review shall indicate where improvements in data flow, coordination between organizational units, compliance determinations, and tracking may be made. EPA Region III will use the findings of the review to improve procedures for reviewing incoming data from and documenting compliance decisions related to DC public water systems.

The review protocol shall include:

- interview questions to be asked of the EPA Region III DI program staff to ensure that the team understands the DI program's regulatory implementation policies and data management practices;
- a list of questions designed to capture the team's findings and impressions. These questions shall be answered while on-site to the extent possible;
- EPA Region III's use of the Safe Drinking Water Information System, State Version (SDWIS-State) and/or SDWIS Prime tools; and
- data capture forms to be used for the review.

For budgeting purposes, the Contractor should anticipate providing two (2) staff (at least one experienced in performing data verifications/program reviews) for an on-site visit in Philadelphia lasting on more than three (3) days. The report is anticipated to be approximately 40 pages, excluding organizational charts and other supplemental information deemed relevant, which should be included in appendices. The draft report will be provided to the WACOR for comments and corrections. The report will be reviewed simultaneously by the WACOR and one to two other EPA commenters who will provide comments. The Contractor shall incorporate reviewer comments and deliver the final report in electronic format. Email submission is acceptable, as is posting of large documents to a secure FTP website.

Deliverables: on-site review, draft and final reports

#### **Task 5 – Certified Operator Status Update**

Under Work Assignments 0-04, 1-04, and 2-04 of the current contract, the Contractor collected information on the status of certified operators at public water systems in the District. The Contractor shall update this listing. For planning purposes, the Contractor shall gather this information when sanitary surveys are conducted at public water systems under this work assignment. For any public water system not planned for a visit under this work assignment, the

Contractor shall by August 1, 2018 prepare a list of those certified operators whose certifications have expired or will expire between July 1, 2018 and December 31, 2018 for EPA follow-up. The Contractor shall by February 1, 2019 prepare a list of those certified operators whose certifications have expired or will expire between January 1, 2019 and June 30, 2019 for EPA follow-up.

Deliverables: two listings of operator certification expiration dates set to expire

### **Task 6 - SDWIS Data Management Support**

The Contractor shall assist EPA with implementation of its data management responsibilities by completing the following tasks:

#### **Subtask 6.1 – SDWIS/State Implementation Assistance**

The Contractor shall assist EPA with hosting SDWIS/State on the Contractor's server and optimizing the use based on any issues or gaps noted during a recent DC direct implementation program review and for input of monitoring data and data obtained during sanitary surveys. This could include: importing monitoring schedules; assistance with defining monitoring locations; assistance with electronic data importing via XML sampling and lab to state; and other data management related tasks such as the use of Drinking Water Watch; identifying and assisting with correcting errors or omissions; and making recommendations for improvements in the use and maintenance of SDWIS/State.

#### **Subtask 6.2 - SDWIS Transition to Prime and CMDP Support**

The Contractor shall support the regional transition to the Compliance Data Monitoring Portal (CMDP) and SDWIS Prime. The Contractor shall assist in setting up and running both test and live versions of CMDP and SDWIS Prime and work with the region, DC PWSs, and laboratories to ensure the new systems function properly after the transition. Work shall include, but not be limited to: detecting and correcting corrupt and/or inaccurate records; migrating data from SDWIS to SDWIS Prime; determining and setting SDWIS Prime system configuration; and setting up and initiating stakeholder and end user education and communication. The Contractor shall assist in identifying and linking interfacing applications with SDWIS Prime; and provide user support, such as training and assisting users having issues with CMDP and SDWIS Prime.

For planning purposes, the Contractor shall provide 2-3 webinars, no longer than one hour in length, to train regional staff on the use of new tools or functions. The topics for the webinars will be defined by the WACOR as needs arise.

Deliverables: Data Management technical assistance to be provided through emails, conference calls, webinars or meetings

### **Task 7 – Revised Total Coliform Rule (RTCR) Implementation**

The Contractor shall assist EPA with implementation of this rule by completing the following tasks:

#### **Subtask 7.1 - RTCR Level 2 Assessments**

The Contractor shall be prepared to conduct two Level 2 assessments as needed on very short notice. The staff conducting these assessments shall have demonstrated to the WACOR that they are qualified to conduct these assessments based on previously provided documentation under WA 0-04 and certification from EPA Region III. All assessments shall include EPA staff and staff representing the PWS. All findings of the assessment shall be documented on the EPA Region III Level 2 Assessment Form developed by the Contractor under WA 1-04.

#### **Subtask 7.2 - RTCR Training course**

The Contractor shall prepare and deliver a training course in Philadelphia for EPA Region III staff to enable staff to become knowledgeable about Level 1 and Level 2 assessments. This 6-8 hour course shall cover the following topics: understanding and analyzing water quality data from water sources and distribution systems; disinfection processes including breakpoint chlorination; cause and effect of potential drinking water problems related to sanitary defects; difference between sanitary defects and significant deficiencies and appropriate corrective actions; approaches to flushing; storage tanks and water age issues; depictions of appropriate sampling locations and taps; and explanations of backflow prevention and cross connection control.

For planning purposes, the Contractor shall develop and provide to the WACOR: a draft outline of the course and draft slides; final course materials shall be due within two weeks of receipt comments by the WACOR; course evaluation; and certificates for participants.

Deliverables: Potential Level 2 assessments at DC public water systems; one RTCR Training course with draft and final course training materials

#### **Task 8 - Drinking Water Training**

The Contractor shall provide two drinking water training courses in Philadelphia to EPA regional staff on the Phase II/V Rule and the Disinfectant and Disinfection Byproduct Rules. Using existing Contractor developed for EPA training materials, the Contractor shall provide to the WACOR: agenda; slides; student handouts; classroom activities as needed to enhance lectures and to benefit student understanding of the materials; course evaluation; and certificates for attendees. The Contractor shall hold one or two planning conference calls with the WACOR to discuss course logistics, materials, etc.

Deliverables: two training courses with draft and final course training materials

#### **Task 9 – Just in Time Technical Assistance**

Through the use of written Technical Direction, the WACOR will provide specific tasks for the Contractor to provide technical assistance to EPA. It is anticipated that these tasks will relate to those activities that cannot be planned for, but must be addressed as situations arise at the water utilities within the District. Such tasks could include, but are not limited to: conducting a RTCR Level 1 assessment facilitated discussion; sampling (to be defined) and conducting a RTCR Level 2 assessment; reviewing proposed treatment changes; review of treatment or other operational studies or plans; and development of public communication materials.



The Contractor shall be prepared to conduct a facilitated discussion at one water system in response to their trigger of a Level 1 assessment. EPA is interested in using such as an opportunity to provide training and awareness to the utility in how to conduct such an assessment. This activity is expected to follow the real-world event that occurred at the water system that triggered a Level 1 assessment. The Contractor shall be prepared to conduct this discussion as soon as possible after resolution of the event by the water system and to document discussions, identify additional training needed on the part of the water system and provide an evaluation form to participants.

The Contractor shall estimate minimal efforts for this task. EPA will assist with sample bottle procurement if these can be obtained from EPA's laboratory. EPA is not authorizing the Contractor to purchase bottles and supplies. This will be authorized via written technical direction at the time the sampling needs (parameter(s), quantity, locations) are defined.

Deliverables: Completed tasks as required via written technical direction with written reports or assessment forms to document the work completed and recommendations; analytical results; details on sampling team preparations

### **Sampling**

Samples to be collected in the District of Columbia under Task 7 and 9 at the written request of the WACOR shall be analyzed either at EPA's Environmental Science Center at Ft. Meade (if available) or at another certified drinking water lab. Samples shall not be analyzed by the United States Army Corps of Engineers, Washington Aqueduct. In order to be prepared to complete such sampling, the Contractor shall be prepared to staff two sampling teams consisting of at least two persons with at least one expert sampler and the necessary supplies. The Contractor shall be prepared to be deployed with very short notice from the WACOR.

### **Task 10 – Sanitary Survey Training Course**

The Contractor shall provide an agenda, training slides, and other materials and conduct a sanitary survey training course for state staff. The Contractor shall use course materials developed under this contract, Work Assignment #1-04 with only minimal updating. This course shall be held in Pennsylvania and include field visits to a ground water and a surface water public water system. The Contractor shall plan for a 4-day course with a class size of 20 -25 students. The Contractor shall provide all resource documents electronically to all students for their future use. The Contractor shall provide a course evaluation form to gather student feedback on the training and provide a summary of this feedback to the EPA WACOR. The Pennsylvania Department of Environmental Protection and the EPA WACOR will assist with locating water systems for onsite visits.

Deliverables: One multi-day sanitary survey course, resource materials, course evaluation summary.

### **Task 11 – SDWIS State Training in Maryland**

The Contractor shall provide a 3-day training course for staff in the drinking water program at the Maryland Department of the Environmental (MDE). This training shall be held in Baltimore,

Maryland in March or early April 2019. To facilitate planning for this training, the Contractor shall plan to hold no more than two conference calls with the WA COR and MDE staff. The Contractor shall develop daily agenda, student materials, flowcharts and slides as applicable for this course, assuming a class size of 25.

Day One shall be training for all MDE drinking water program staff covering:

- Inventory--General review of how to use SDWIS inventory to obtain information about a system (e.g., sample schedules, historical sampling data, facilities information, source water information, violations, etc.);
- Drinking Water Watch--General review of Drinking Water Watch functions and capabilities (e.g., generating sample schedules, Consumer Confidence Reports, violation information, reviewing data (Revised Total Coliform Rule (RTCR), chemical, Lead & Copper), viewing facility sampling points, etc.);
- Inventory/Facilities--updating water facility information, adding/updating Treatment Units & Objective/Process Associations, adding storage facilities, updating well/source information;
- Legal Entities – i.e. adding/updating legal entities, updating Operator Class and viewing Point of Contact assignments; and
- Using Relation.MDB (interface for extracting data from SDWIS by using MS Access or Sequel queries), explanation of the contents of the tables (table names & labels), and creating some basic queries in Relation.MDB.

Days two and three shall be training for MDEs Rule Managers covering:

- Monitoring/Sample Schedules--Updating schedules (i.e., closing old schedules and creating new schedules) based on facility changes, population changes, increased or reduced monitoring requirements;
- Monitoring/Sample Schedules--Using "Sequence Year" for contaminants that are monitored less frequently than annually;
- Inventory/Population--SDWIS's ability to incorporate more than one population type (e.g., for systems with transient and non-transient populations, the RTCR schedule will be based on total populations, but the Disinfectant/Disinfection Byproducts (DDBP) and Lead and Copper Rule (LCR) schedules will be based on non-transient populations);
- Inventory--using "Out of Service" indicators for facilities or systems temporarily out of service (suspends monitoring requirements for the specific facilities or systems);
- Compliance Determination--Reviewing all functions of RTCR Compliance Determination, Compliance Decision Support, and Post-Compliance Decision Support Processing;
- Monitoring/Violations--Reviewing violation status and enforcement actions and how to create and associate enforcement actions;
- Enforcement/Public Notice Schedules--Tracking Public Notice deadlines;
- Enforcement/Compliance Schedules--using compliance schedules (LCR, DDBP Operational Evaluation Level, CCR);
- Sampling--data entry for adding sample results;
- Sampling/Maintaining Result Averages--reviewing historical SDWIS data using "Maintain Result Averages" function, and the "Sample/Summary Search Page"; and



- Water System Group--Creating and using groups for tracking, monitoring assessments, and compliance.

Deliverables: 3-day training course and course materials

## **Task 12 – Enhancing Water Quality Monitoring Data**

Water quality monitoring is a crucial aspect to protecting water resources. Under the Clean Water Act, state, tribal and federal agencies monitor lakes, streams, rivers and other types of water bodies to determine water quality condition. The data generated from these monitoring activities help water resource managers know where pollution problems exist, where to focus pollution control energies and where progress has been made. EPA Region 3 needs to use this data for source water protection activities under the Safe Drinking Water Act.

The Water Quality Exchange (WQX) is the mechanism for data partners to **submit** water monitoring data to EPA. WQX Web is an online tool for EPA data partners to upload and share data with EPA and the public. WQX Web enables data owners to submit physical, chemical, biological, habitat, index, and metrics data. WQX Web relies on the common WQX format and schema. WQX Web is traditionally a way to submit excel or other text files manually, however, WQX Web can also be used to automate data submission via REST web services from a local database or application.

The Contractor shall assist EPA, states, and local partners with the clean-up, reformatting as needed and uploading of water quality monitoring data to WQX. If determined to be more efficient, the Contractor shall either (1) assist state and local partners establish a data node to automate flow from state and local partners to WQX; or (2) establish a data submission portal that would allow state monitoring groups and county conservation districts to submit data to the state's water quality monitoring database, which may already support automated data flow to WQX.

For planning purposes, the Contractor shall hold no more than three conference calls with the WA COR and owners of data to discuss the status of data and the extent of clean up needed for entry into the WQX. Also, for planning purposes, the Contractor shall spend no more than 300 hours on this task given that the extent of data clean-up will not be known until the Contractor receives and reviews the data.

For more technical details on uploading data via the WQX, please see EPA's webpage at: <https://www.epa.gov/waterdata/water-quality-data-wqx>

Deliverables: enhanced water quality data uploaded into WQX

#### IV. SCHEDULE OF DELIVERABLES:

<b>TASK No.</b>	<b>DELIVERABLE</b>	<b>DATE DUE TO EPA</b>
<b>0</b>	Work Plan and budget	According to contract
	Monthly progress and financial reports	Monthly according to contract
<b>1.</b>	Participation in conference calls	No more than 3 calls; Dates TBD
	Draft TEWG Meeting Notes	7 business days after workgroup conference call
	Final TEWG Meeting Notes or review of EPA's draft final Meeting Notes	Within 7 days of receipt of EPA comments/draft final document
<b>2.</b>	Conduct 3 Sanitary Surveys in DC	To be conducted between October 2018 through May 2019
	Draft Sanitary Survey Report for Washington Aqueduct	Within <del>1-month</del> three weeks of completion of the sanitary survey
	Final Sanitary Survey Report for Washington Aqueduct	Within 2 weeks of receipt of EPA comments/request for revision
	Draft Sanitary Survey Reports for Naval Facilities	Within two weeks of completion of the sanitary survey
	Final Sanitary Survey Report for Naval Facilities	Within 1 week of receipt of EPA comments/request for revision
	Review of Sanitary Survey Report minor response comments from reviewers	As requested; response due within 2 weeks of EPA request to review
<b>3.</b>	Finalize work under WA 2-04 Training course for water suppliers in DC	To be conducted no later than March 2019
	Chlorine Calibration Video	No later than July 30, 2018
<b>4.</b>	DC DI Program Implementation Review	To be conducted no later than October 30, 2018
<b>5.</b>	Certified Operator status	During the water system sanitary surveys; and for others by August 1, 2018 and February 1, 2019
<b>6.</b>	Data Management Assistance	Ongoing technical assistance to enhance EPA's usage of SDWIS
<b>7.</b>	RTCR Implementation Subtask 7.1 Conduct Level 2 assessments	As needed under Written Technical Direction
	Subtask 7.2 Training course in Philadelphia	October – December 2018
<b>8.</b>	Conduct Training Courses in Philadelphia Phase II/V Rule and D/DBP Rule	Spring 2019

<b>TASK No.</b>	<b>DELIVERABLE</b>	<b>DATE DUE TO EPA</b>
<b>9.</b>	Just in Time Technical Assistance	Will be handled by written Technical Direction with written reports to follow completion of tasks
<b>10.</b>	Sanitary Survey Training Course in Pennsylvania	Spring 2019
<b>11.</b>	SDWIS/State training for MDE staff in Baltimore	March or early April 2019
<b>12</b>	Enhancement of STORET data input	Ongoing through June 30, 2019

## **V. MISCELLANEOUS**

### **Software Application Files and Accessibility**

Software Application files, if delivered to the Government, shall conform to the requirements relating to accessibility as detailed to the 1998 amendments to the Rehabilitation Act, particularly, but not limited to, § 1194.21 Software applications and operating systems and § 1194.22 Web-based intranet and internet information and applications. See:

<http://www.section508.gov/>

Preferred text format: MS Word, 8.0 or higher (Office 2003 or higher)

Preferred presentation format: Power Point, Office 2003 or higher

Preferred graphics format: Each graphic is an individual GIF file

Preferred portable format: Adobe Acrobat, version 6.0

## **TRAVEL**

Travel is anticipated for this work assignment following appropriate approval by the work assignment CLCOR. Any travel will be allowable only in accordance with the limitation of FAR 31.205-43 and FAR 31.205-46, and must be approved by the appropriate EPA CLCOR prior to travel taking place.

This work assignment anticipates 3 separate trips to Washington DC, for Tasks # 2 and 3. This work assignment anticipates 4 trips to Philadelphia, for Tasks # 4, 7.2, and 8. Under Task 10, this work assignment anticipates 1 multi-day trip to Pennsylvania. Under task 11, this work assignment anticipates 1 trip to Baltimore, Maryland. Each trip will involve no more than 2 staff persons. Travel will occur within the timeframes noted on the Deliverables table. Tasks #7.1 and 9 will include travel but only if and when written technical direction is provided for work under these tasks.

## **CONTRACTOR IDENTIFICATION**

Contractor personnel shall always identify themselves as contractor employees by name and organization and physically display that information through an identification badge. Contractor personnel are prohibited from acting as the Agency's official representative. The Contractor shall refer any questions relating to the interpretation of EPA policy, guidance, or regulation to the Contracting Officer (CO), CLCOR and/or WACOR.

**PRINTING**

All copying and printing shall be accomplished within the limitations of the printing clause of the contract.

**VI. Quality Assurance Surveillance Plan**

All task(s) identified in the performance work statement above are subject to review and approval by the WACOR based on the general guidelines of the contract quality assurance surveillance plan regarding: Programmatic, cost control, schedule, and document development standards.